

## Laboratory Training of Clinical Skills

### Educational subject description sheet

#### Basic information

<p><b>Department</b> Faculty of Medicine</p> <p><b>Field of study</b> Medical Program</p> <p><b>Study level</b> long-cycle master's degree program</p> <p><b>Study form</b> full-time</p> <p><b>Education profile</b> general academic</p> <p><b>Disciplines</b> Medical science</p> <p><b>Subject related to scientific research</b> Yes</p>		<p><b>Didactic cycle</b> 2020/21</p> <p><b>Realization year</b> 2021/22, 2022/23, 2023/24, 2024/25</p> <p><b>Lecture languages</b> English</p> <p><b>Block</b> obligatory for passing in the course of studies</p> <p><b>Mandatory</b> obligatory</p> <p><b>Examination</b> graded credit</p> <p><b>Standard groups</b> D. Behavioral and social sciences with elements of professionalism, E. Clinical non-procedural medical disciplines, F. Clinical procedural sciences</p>	
<b>Subject coordinator</b>		Stanisław Górski, Magdalena Szopa, Michał Pers, Jakub Pabjańczyk, Agnieszka Skrzypek, Łukasz Mątecki, Małgorzata Szczepanek, Marcin Waligóra, Grzegorz Cebula, Anna Kocurek	
<b>Lecturer</b>		Stanisław Górski, Michał Pers, Jakub Pabjańczyk, Agnieszka Skrzypek, Agata Stalmach-Przygoda, Łukasz Mątecki, Małgorzata Szczepanek, Marcin Waligóra, Grzegorz Cebula, Anna Kocurek	
<b>Period</b> Semester 3	<b>Examination</b> credit	<b>Activities and hours</b> simulations: 39	<b>Number of ECTS points</b> 2.0
<b>Periods</b> Semester 5, Semester 6	<b>Examination</b> credit	<b>Activities and hours</b> classes: 18, e-learning: 12	<b>Number of ECTS points</b> 2.0

<b>Period</b> Semester 8	<b>Examination</b> credit  <b>Activities and hours</b> classes: 32	<b>Number of ECTS points</b> 1.0
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<b>Periods</b> Semester 9, Semester 10	<b>Examination</b> graded credit  <b>Activities and hours</b> e-learning: 22, simulations: 22	<b>Number of ECTS points</b> 1.0
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## Goals

C1	1/4 - To provide the student with knowledge about the obtaining of medical history, biomedical part as well as communication skills and techniques. Shaping and strengthening the patient-centered attitude. Developing the student's physical examination skills, including breast and per rectum examination. Preparing the student for clinical classes. 2/4 - Learn how to effectively communicate information, including obtaining informed consent and the process of involving the patient in making health decisions. 3/4 - Learning to cope with difficult communication situations (e.g. passing unsuccessful information, dealing with patient expectations, aggressive behavior) 4/4 - Teaching teamwork, team management in crisis situations, practical application of communication skills in simulated clinical scenarios.
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## Subject's learning outcomes

Code	Outcomes in terms of	Effects	Examination methods
<b>Knowledge - Student knows and understands:</b>			
W1	ethical, social and legal conditions for practicing the medical profession and the principles of health promotion, based on scientific evidence and accepted standards	O.W4	classroom observation
W2	principles and methods of communication with the patient and his/her family, which are aimed at building empathic, trust-based relationships	D.W5	classroom observation
W3	the importance of verbal and non-verbal communication in the process of communicating with the patient and the notion of trust in the interaction with the patient	D.W6	classroom observation
W4	the role of the patient's family in the treatment process	D.W10	classroom observation
W5	forms of violence, models explaining domestic and institutional violence, the social determinants of the various forms of violence and the role of the doctor in recognizing it	D.W3	classroom observation
W6	basic psychological mechanisms of human functioning in health and disease	D.W9	classroom observation
W7	principles of teamwork	D.W18	classroom observation
W8	principles of motivating the patient to health-promoting behaviors and informing about unsuccessful prognosis	D.W15	classroom observation

W9	guidelines for cardiopulmonary resuscitation of newborns, children and adults	F.W7	classroom observation
W10	the principles of health promotion, its tasks and main lines of action, with particular reference to the role of elements of a healthy lifestyle	D.W14	classroom observation
<b>Skills - Student can:</b>			
U1	identify medical problems and prioritize medical management	O.U1	classroom observation
U2	identify life-threatening conditions that require immediate medical intervention	O.U2	classroom observation
U3	plan the diagnostic procedure and interpret its results	O.U3	classroom observation
U4	implement appropriate and safe therapeutic treatment and predict its effects	O.U4	classroom observation
U5	inspire the learning process of others	O.U6	classroom observation
U6	communicate with the patient and his family in an atmosphere of trust, taking into account the needs of the patient	O.U7	classroom observation
U7	communicate and share knowledge with colleagues in a team	O.U8	classroom observation
U8	take into account the subjective needs and expectations of the patient resulting from socio-cultural conditions in the process of therapeutic management	D.U1	classroom observation
U9	build an atmosphere of trust throughout the entire diagnostic and treatment process	D.U4	classroom observation
U10	talk to the adult patient, child and family using active listening and empathy techniques and talk to the patient about his or her life situation	D.U5	classroom observation
U11	inform the patient about the purpose, course and possible risks of the proposed diagnostic or therapeutic measures, and obtain his or her informed consent to take these measures	D.U6	classroom observation
U12	involve the patient in the therapeutic process	D.U7	classroom observation
U13	provide the patient and his or her family with information about unfavorable prognosis	D.U8	classroom observation
U14	provide advice on therapeutic recommendation compliance and following healthy lifestyle	D.U9	classroom observation
U15	communicate with colleagues with constructive feedback and support	D.U12	classroom observation
U16	apply basic psychological motivational and supportive interventions	D.U11	classroom observation
U17	follow the patient's rights	D.U15	classroom observation
U18	be able to work in a multiprofessional team, in a multicultural and multinational environment	D.U21	classroom observation
U19	identify risk factors for violence, recognize violence and respond accordingly	D.U10	classroom observation
U20	carry out a medical history with an adult patient	E.U1	OSCE examination

U21	conduct a full and targeted physical examination of an adult patient	E.U3	OSCE examination
U22	conduct an approximate hearing and field of vision examination, and an otoscopic examination	E.U6	OSCE examination
U23	assess the general condition, state of consciousness and awareness of the patient	E.U7	classroom observation
U24	recognize immediate life-threatening conditions	E.U14	classroom observation
U25	plan diagnostic, therapeutic and prophylactic procedures	E.U16	classroom observation
U26	interpret the results of laboratory tests and identify the causes of abnormalities	E.U24	classroom observation
U27	perform basic procedures and medical procedures including: 1) body temperature measurement, heart rate measurement, non-invasive blood pressure measurement, 2) monitoring of vital signs by means of a patient monitor, pulse oximetry, 3) spirometric examination, oxygen therapy, assisted ventilation and replacement ventilation, 4) introduction of the oropharyngeal tube, 5) intravenous, intramuscular and subcutaneous injections, cannulation of peripheral veins, collection of peripheral venous blood, collection of blood for culture, collection of arterialized capillary blood, collection of arterialized capillary blood, 6) taking nasal, throat and skin swabs, puncturing of the pleural cavity, 7) bladder catheterization in women and men, gastric tube, gastric lavage, gastric lavage, enema, 8) standard resting electrocardiogram with interpretation, electrical cardioversion and cardiac defibrillation, 9) simple strip tests and blood glucose measurements	E.U29	test
U28	plan specialist consultations	E.U32	classroom observation
U29	maintain patient's medical records	E.U38	classroom observation
U30	examine breasts, lymph nodes, thyroid gland and abdominal cavity in terms of acute abdomen and perform digital rectal examination	F.U6	OSCE examination
U31	operate according to the algorithm of advanced resuscitation activities	F.U11	classroom observation
U32	perform ophthalmic screening tests	F.U19	OSCE examination
U33	conduct an approximate hearing test	F.U26	OSCE examination
U34	insert a catheter into the bladder	F.U32	OSCE examination
U35	to take the informed and legally effective consent: a) for high-risk diagnostic procedures (e.g. gastroscopy, colonoscopy), endoscopic retrograde cholangiopancreatography) b) for high-risk diagnostic procedures (transcutaneous biopsy under control) USG) c) surgery to remove the gallbladder	F.U33	classroom observation
U36	to pass on information about the death of a close friend and relative	F.U34	classroom observation
<b>Social competences - Student is ready to:</b>			
K1	to establish and maintain deep and respectful contact with patients and to show understanding for differences in world views and cultures	O.K1	classroom observation

K2	to be guided by the well-being of a patient	O.K2	classroom observation
K3	perceive and recognize own limitations and self-assessing educational deficits and needs	O.K5	classroom observation
K4	take actions towards the patient on the basis of ethical norms and principles, with an awareness of the social determinants and limitations of the disease	O.K4	classroom observation
K5	formulate conclusions from own measurements or observations	O.K8	classroom observation
K6	implement the principles of professional camaraderie and cooperation in a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment	O.K9	classroom observation
K7	assume responsibility for decisions taken in the course of their professional activities, including in terms of the safety of oneself and others	O.K11	classroom observation

### Calculation of ECTS points

#### Semester 3

Activity form	Activity hours*
simulations	39
preparation for classes	5
<b>Student workload</b>	<b>Hours</b> 44
<b>Workload involving teacher</b>	<b>Hours</b> 39
<b>Practical workload</b>	<b>Hours</b> 39

\* hour means 45 minutes

#### Semester 5, Semester 6

Activity form	Activity hours*
classes	18
e-learning	12
preparation for classes	10
<b>Student workload</b>	<b>Hours</b> 40
<b>Workload involving teacher</b>	<b>Hours</b> 30

<b>Practical workload</b>	<b>Hours</b> 18
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\* hour means 45 minutes

### Semester 8

<b>Activity form</b>	<b>Activity hours*</b>
classes	32
preparation for classes	10
<b>Student workload</b>	<b>Hours</b> 42
<b>Workload involving teacher</b>	<b>Hours</b> 32
<b>Practical workload</b>	<b>Hours</b> 32

\* hour means 45 minutes

### Semester 9, Semester 10

<b>Activity form</b>	<b>Activity hours*</b>
e-learning	22
simulations	22
preparation for classes	5
<b>Student workload</b>	<b>Hours</b> 49
<b>Workload involving teacher</b>	<b>Hours</b> 44
<b>Practical workload</b>	<b>Hours</b> 22

\* hour means 45 minutes

## Study content

<b>No.</b>	<b>Course content</b>	<b>Subject's learning outcomes</b>	<b>Activities</b>
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1.	<p>Learning history taking skills. The biomedical part of the history taking. Patient goals identification, screening, summary (and reporting), opened and closed questions (SOCRATES) - exercises using interviews prepared by students. Communication skills: clarifications, signposts, hidden non-verbal cues. Patient's perspective.</p> <p>Improving clinical examination skills. Building a patient-oriented attitude. Head and neck examination. Examination of pupil reaction to light. Reed tests, otoscope and ophthalmoscope examination. Chest examination, lung examination. Listening to lung sounds on the simulator. Learning to examine the heart. Learning to examine peripheral cardiovascular system. Listening to heart sounds and murmurs on the simulator. Learning to exam the abdomen. Learning per rectum examination. Oncological examination. Breast examination. Prostate examination. Neurological examination. Motion system examination. Bladder catheterization skill.</p>	W2, W3, U10, U15, U17, U20, U21, U22, U23, U29, U30, U32, U33, U34, U5, U6, U7, U9, K3, K6	classes, simulations
2.	<p>5th semester. Skills in providing effective information, including obtaining informed consent. Involving the patient in the health decision-making process. Motivating to comply with the recommendations. Basic rules for ECG interpretation.</p>	W10, W2, W3, W4, W6, W8, U11, U12, U14, U16, U17, U35, U5, U6, U8, U9, K1, K2, K3, K4, K5, K7	e-learning, simulations
3.	<p>8th semester. Students will practice the skills of conducting medical consultation regarding intimate topics, dealing with patient expectations and aggression, as well as the ability to convey unsuccessful information.</p>	W2, W3, W4, W6, U10, U11, U12, U13, U16, U17, U36, U6, U8, U9, K1, K2, K3, K4, K5, K7	simulations
4.	<p>10th semester Patient turn over using SBAR formula. Non-technical skills in the team. Providing unfavorable information. Communication techniques in collecting an interview. Management of aggression. Management of suspected domestic violence. Verbal and non-verbal communication to patient and team.</p>	W1, W2, W3, W4, W5, W7, W8, W9, U1, U10, U11, U12, U13, U15, U17, U18, U19, U2, U20, U21, U24, U25, U26, U27, U28, U3, U31, U34, U35, U36, U4, U5, U6, U7, U8, U9, K1, K2, K3, K4, K5, K6, K7	e-learning, simulations

## Course advanced

### Semester 3

#### Teaching methods:

brainstorm, classes in clinical skills room, demonstration, discussion, OSCE examination, educational film, presentation, simulation, low fidelity simulation, virtual patient

Activities	Examination methods	Credit conditions
simulations	OSCE examination	Objective Standardized Clinical Exam (OSCE) - 5 stations. Stations: 1. 10-minute, medical history 2. 5-minute, simulator (lung and heart sound interpretation). 3. Physical examination 1 4. Physical examination 2 5. Physical examination 3 Physical examination stations also include: rectal and prostate exams on the trainer, breasts examination on the trainer, investigations using an ophthalmoscope, otoscope, neurological hammers, and tuning fork, bladder catheterization and IV catheterization on the trainer. Conditions for obtaining credit at the OSCE: - positive passing of the interview station (both checklist and global rating) - positive passing of at least 3 out of 4 remaining stations.

## Semester 5, Semester 6

### Teaching methods:

demonstration, discussion, e-learning, educational film, simulation, high fidelity simulation

Activities	Examination methods	Credit conditions
classes	classroom observation	Continuous assessment during classes At least one-time participation in a role play with a simulated patient.
e-learning	classroom observation	The separate test form for each ECG lesson. The test consists of two parts: theoretical and practical. Completing the theoretical part involves solving the single-choice test on the theoretical basis of the discussed issue (5 questions). The practical part consists of solving the multiple-choice test on the interpretation of the given ECG (1 multiple-choice question). Pass requirements, obtain a total of at least 50% of the points.

## Semester 8

### Teaching methods:

demonstration, discussion, simulation, simulated patient

Activities	Examination methods	Credit conditions
classes	classroom observation	Continuous assessment during classes At least one-time participation in a role play with a simulated patient.

## Semester 9, Semester 10

### Teaching methods:

e-learning, high fidelity simulation, simulated patient

Activities	Examination methods	Credit conditions
e-learning	test	The separate test form for each ECG lesson. The test consists of two parts: theoretical and practical. Completing the theoretical part involves solving the single-choice test on the theoretical basis of the discussed issue (5 questions). The practical part consists of solving the multiple-choice test on the interpretation of the given ECG (1 multiple-choice question). Pass requirements, obtain a total of at least 50% of the points.

Activities	Examination methods	Credit conditions
simulations	classroom observation	Acting as team leader and team member during simulated scenarios.

## Entry requirements

1/4 - Knowledge of normal anatomy and human physiology.

2/4 - Knowledge of normal anatomy, human physiology and the basics of pathology. Student passed the subject Laboratory Training of Clinical Skills for year 2 and passed the OSCE exam year 2. Student already have contact with patients during clinical classes.

3/4 - Completed subjects Laboratory Training of Clinical Skills for year 2 and 3.

4/4 - Subjects passed for the year IV: Internal diseases , Surgery, Pediatrics, Anesthesiology and intensive care, Pharmacology, Laboratory Teaching Clinical Skills.

## Literature

### Obligatory

1. Semestr 3 i 4. Bates' Pocket Guide to Physical Examination and History Taking
2. Semestr 5. Skills for Communicating with Patients, 3rd Edition, Jonathan Silverman
3. Semestr 8. Skills for Communicating with Patients, 3rd Edition, Jonathan Silverman
4. Semester 10. ERC guidelines 2015.

### Optional

1. Semestr 3 i 4. Bates' Guide to Physical Examination and History Taking Macleod's Clinical Examination 13th Edition
2. Semestr 5. Making the Patient Your Partner: Communication Skills for Doctors and Other Caregivers Macleod's Clinical Examination 13th Edition
3. Semestr 8. Making the Patient Your Partner: Communication Skills for Doctors and Other Caregivers Macleod's Clinical Examination 13th Edition

## Standard effects

Code	Content
D.U1	take into account the subjective needs and expectations of the patient resulting from socio-cultural conditions in the process of therapeutic management
D.U4	build an atmosphere of trust throughout the entire diagnostic and treatment process
D.U5	talk to the adult patient, child and family using active listening and empathy techniques and talk to the patient about his or her life situation
D.U6	inform the patient about the purpose, course and possible risks of the proposed diagnostic or therapeutic measures, and obtain his or her informed consent to take these measures
D.U7	involve the patient in the therapeutic process
D.U8	provide the patient and his or her family with information about unfavorable prognosis
D.U9	provide advice on therapeutic recommendation compliance and following healthy lifestyle
D.U10	identify risk factors for violence, recognize violence and respond accordingly
D.U11	apply basic psychological motivational and supportive interventions
D.U12	communicate with colleagues with constructive feedback and support
D.U15	follow the patient's rights
D.U21	be able to work in a multiprofessional team, in a multicultural and multinational environment
D.W3	forms of violence, models explaining domestic and institutional violence, the social determinants of the various forms of violence and the role of the doctor in recognizing it
D.W5	principles and methods of communication with the patient and his/her family, which are aimed at building empathic, trust-based relationships
D.W6	the importance of verbal and non-verbal communication in the process of communicating with the patient and the notion of trust in the interaction with the patient
D.W9	basic psychological mechanisms of human functioning in health and disease
D.W10	the role of the patient's family in the treatment process
D.W14	the principles of health promotion, its tasks and main lines of action, with particular reference to the role of elements of a healthy lifestyle
D.W15	principles of motivating the patient to health-promoting behaviors and informing about unsuccessful prognosis
D.W18	principles of teamwork
E.U1	carry out a medical history with an adult patient
E.U3	conduct a full and targeted physical examination of an adult patient
E.U6	conduct an approximate hearing and field of vision examination, and an otoscopic examination
E.U7	assess the general condition, state of consciousness and awareness of the patient
E.U14	recognize immediate life-threatening conditions
E.U16	plan diagnostic, therapeutic and prophylactic procedures
E.U24	interpret the results of laboratory tests and identify the causes of abnormalities

<b>Code</b>	<b>Content</b>
E.U29	perform basic procedures and medical procedures including: 1) body temperature measurement, heart rate measurement, non-invasive blood pressure measurement, 2) monitoring of vital signs by means of a patient monitor, pulse oximetry, 3) spirometric examination, oxygen therapy, assisted ventilation and replacement ventilation, 4) introduction of the oropharyngeal tube, 5) intravenous, intramuscular and subcutaneous injections, cannulation of peripheral veins, collection of peripheral venous blood, collection of blood for culture, collection of arterialized capillary blood, collection of arterialized capillary blood, 6) taking nasal, throat and skin swabs, puncturing of the pleural cavity, 7) bladder catheterization in women and men, gastric tube, gastric lavage, gastric lavage, enema, 8) standard resting electrocardiogram with interpretation, electrical cardioversion and cardiac defibrillation, 9) simple strip tests and blood glucose measurements
E.U32	plan specialist consultations
E.U38	maintain patient's medical records
F.U6	examine breasts, lymph nodes, thyroid gland and abdominal cavity in terms of acute abdomen and perform digital rectal examination
F.U11	operate according to the algorithm of advanced resuscitation activities
F.U19	perform ophthalmic screening tests
F.U26	conduct an approximate hearing test
F.U32	insert a catheter into the bladder
F.U33	to take the informed and legally effective consent: a) for high-risk diagnostic procedures (e.g. gastroscopy, colonoscopy), endoscopic retrograde cholangiopancreatography) b) for high-risk diagnostic procedures (transcutaneous biopsy under control) USG) c) surgery to remove the gallbladder
F.U34	to pass on information about the death of a close friend and relative
F.W7	guidelines for cardiopulmonary resuscitation of newborns, children and adults
O.K1	to establish and maintain deep and respectful contact with patients and to show understanding for differences in world views and cultures
O.K2	to be guided by the well-being of a patient
O.K4	take actions towards the patient on the basis of ethical norms and principles, with an awareness of the social determinants and limitations of the disease
O.K5	perceive and recognize own limitations and self-assessing educational deficits and needs
O.K8	formulate conclusions from own measurements or observations
O.K9	implement the principles of professional camaraderie and cooperation in a team of specialists, including representatives of other medical professions, also in a multicultural and multinational environment
O.K11	assume responsibility for decisions taken in the course of their professional activities, including in terms of the safety of oneself and others
O.U1	identify medical problems and prioritize medical management
O.U2	identify life-threatening conditions that require immediate medical intervention
O.U3	plan the diagnostic procedure and interpret its results
O.U4	implement appropriate and safe therapeutic treatment and predict its effects
O.U6	inspire the learning process of others
O.U7	communicate with the patient and his family in an atmosphere of trust, taking into account the needs of the patient
O.U8	communicate and share knowledge with colleagues in a team
O.W4	ethical, social and legal conditions for practicing the medical profession and the principles of health promotion, based on scientific evidence and accepted standards