SHAHREKORD
University of Medical Sciences



Midwifery (BSc)

(General specifications , plans and headlines)

First Chapter

General specifications of the curriculum Bachelor of Science in Midwifery

1. Name, level and definition:
Bachelor of Science in Midwifery

Definition:
The field of midwifery is one of the fields of medical sciences that its graduates at the bachelor level by providing reproductive health services and performing prenatal, during and postnatal care, caring for neonates, infants and children and providing education and counseling for topics of sexual and reproductive health to women, family and community within the assigned duties, promoting and performing normal and safe as well as physiological childbirth, diagnosing abnormalities in the mother, fetus or newborn, performing emergency measures during and after pregnancy and childbirth, and timely referral of abnormalities strives to ensure the health of the mother, fetus, neonate, infant and child.

2. Values and beliefs:
In our country, considering that learning science is a religious duty, the growth and development of human beings is emphasized, therefore, any education is necessary and desirable for the excellence of human beings and the creation of a better and more productive life.
Since the family is the fundamental unit of society and the main center of human growth and excellence, and women and mothers have a pivotal and decisive role in this center, so pay attention to the physical, mental and social health of mothers and children and providing health services for these vulnerable groups is at the top of government health programs. Therefore, the coverage of such services according to the definition of the field of midwifery falls within its clinical and health dimensions.
In this educational and training course, believing that fertility issues such as pregnancy and childbirth are natural and physiological events of life and that prevention precedes treatment, maintaining natural conditions for fertility events is essential and deviations from natural states must be correct and be carefully identified and guided to the natural path.
It is the right of all families to have the proper care and services of a midwife, regardless of their place of residence, race, ethnicity, age, culture, religion, political beliefs, economic or social status.
The graduate of this course is responsible for achieving high standards of midwifery services and care through education and optimal learning during the school year, continuing education and applying research results, in accordance with national goals and within the scope of duties in accordance with laws and ethics, providing justice, observance of beneficial and non-harm services and authority to clients.

3. Mission:
The mission of this program is to train committed, knowledgeable and skilled midwives, which provides an advanced midwifery and reproductive health services at various levels of prevention, as a member of the health team or independently to clients.

4. Vision:
In 10 years, the graduated of this program based on the program's philosophy and mission, will provide effective midwifery services to patients at the highest professional standard.

5. General goals and objectives of the course:

The Bachelor of Science in Midwifery education program aims at preparing the student to be competent midwives who will play a vital role in improving the quality of life of childbearing families. The teaching and learning process facilitate student's skill development, decision making capacity and application of competencies based on service and profession led education.

On successful completion of this program, the student will have acquired the knowledge, attitude, skills and practices which will enable them to:

1. Collect information to critically analyze social determinants and epidemiological patterns for improving maternal and newborn health outcomes.
2. Utilize appropriate counseling and communication skills to interact effectively with women, children and their families.
3. Integrate the concepts of midwifery process in planning and providing care for women during pregnancy, intrapartum, postpartum and postnatal for newborns care.
4. Uphold midwifery care and its relevance in the care and management for childbearing women and their families.
5. Apply reflective models to drawn lessons from personal experience about own clinical practice in emergency obstetric and neonatal care for mothers and babies.
6. Helping to promote health indicators related to women's reproductive health and the health of infants, children and families.
7. Helping reduce health problems related to mother, fetus, infant and child and reduce their mortality and morbidities
8. Helping to promote natural, physiological and safe childbirth in the country
9. Helping to have a healthy generation and healthy families

6. Professional duties of graduates:

Midwifery graduates are members of the Medical Council and operate under the laws of the Ministry of Health. Therefore, the professional duties of midwifery graduates are in accordance with the job descriptions approved by the Medical Council and the Ministry of Health, and are summarized in the following roles:

7. The roles of graduates:

Midwifery graduates play the following roles in health systems and society:

- Diagnostic, caring and interventional role
- Educational role
- Consulting role
- Preventive role
- Managerial role and research

A. Diagnose, care-intervention

1- Establishing effective professional communication with relevant clients, colleagues and officials
2- Taking the biography of the clients and registering it in their health care file
3- Performing physical examinations of clients and registering it in the file

5- Identifying the required care and intervention measures for clients
6- Diagnosing abnormal cases and timely referral of clients who need expert help to the relevant specialist and follow-up of cases
7- Carrying out prenatal care in normal cases and referring to abnormal cases
8- Guiding and performing natural, safe and physiological delivery
9- Performing family planning services
10- Applying permitted care procedures for clients
11- Accurate recording of all actions taken in the file of clients
12- Identifying the physical, psychological and emotional needs of the clients and recording it in the clients' files
13- Caring for infants and children and recording it in the file

B- Educational role:
- Educating clients and their companions in the field of self-care and referral for care, nutrition and care during pregnancy, identifying risk factors during pregnancy, childbirth preparation, parenting preparation, breastfeeding, family planning, marital and sexual training, teaching reproductive health issues at the level of schools and social centers, etc.
- Participate in continuing education programs

C- Consulting role
- Providing counseling for girls during puberty, before marriage, before pregnancy, pregnancy, childbirth and after childbirth and counseling in the field of sexual health, menopause and old age and family planning

D- Preventive role:
- Planning and implementing prenatal care for clients and following up on related problems to ensure risk elimination
- Participation in screening programs of the country's health system
- Execution of preventive services and observance of prevention criteria in performing duties
- Performing or monitoring maternal and child vaccination
- Monitoring the growth and development of infants and children

E- Managerial role and research:
- Participation in the administration of the unit under the activity and managing midwives
- Participation in research projects

Expected core competencies and skills

A: Expected general capabilities:

- Effective professional communication

- Critical thinking and risk assessment
- Problem solving skills
- Interpretation of findings and results of related laboratory tests
- Evidence-based decision making
- Request advice and give advice
- Rational prescription of authorized drugs
- Follow up clients

Note: The above should be done in sufficient numbers so that the teacher or the student's educational supervisor can make sure that the learning has taken place as required.

B: Expected specific capabilities

Midwifery students should learn and practice the following practical skills during their training:

No.	Skill	Minimum number of times to do		
		observation	participation	Perform independently under the supervision of an instructor
1	**Physical assessment and examinations include:**			
2	Examination of uterus and pelvis and vaginal exam of women in gynecology practicum/internship	5	5	80
3	Pregnancy examinations in prenatal practicum/internship	5	5	80
4	Vaginal examination in labor practicum/internship	5	5	80
5	Leopold s Maneuvers in prenatal and labor practicum/internship	5	5	80
6	Uterine examination after cesarean section	5	5	10
7	Performing discharge examinations in labor & delivery practicum/internship	2	2	10
8	Breast examination in gynecology and health practicum/internship	5	5	10
9	Neonatal examination in neonatal practicum/internship	5	5	20
10	Performing physical examinations of adults and studying their files and recording it in internal and surgical practicum/internship	5	5	40
11	Examinations related to rape in a forensic practicum	2	2	2
12	**Other specific skills include:**			
13	Evaluation of fetal health indicators and tests	5	5	20
14	Intravenous blood sampling of infants and adults each:	2	2	5
15	Breech delivery and twin delivery (if available)	2	2	-
16	Monitor the growth and development of a healthy child in Health practicum/internship	5	5	10
17	Insert the IUD	5	10	10
18	Remove the IUD	5	5	10
19	Insertion of urinary catheter in women and girls	5	5	10
20	Observe epidural anesthesia	5	-	-

21	Labor control	2	2	120
22	Performing with cephalic presentation in multiparous and nulliparous women	2	2	60
23	Labor induction with oxytocin	5	5	15
24	Diagnosis of high-risk pregnancies (premature labor, placenta abruptio, preeclampsia, ...) and prompt referral and participation in care, management and delivery	Each 5	Each 5	Each 5
25	Perform and repair episiotomy	5	5	15
26	Repair first and second degree of perineal tears if necessary	2	3	15
27	Courage (removing the placenta by hand or tool)	5	5	3
28	Performing subcutaneous, intradermal, intramuscular and intravenous injections each:	1	1	5
29	Pain control in childbirth (physical, psychological, non-pharmacological and pharmacological methods medical methods) each:	5	5	20
30	Anthropometric measurements of neonates in neonatal practicum/internship	5	5	20
31	Sampling of newborn heels	5	5	3
32	Insert the vein catheterization and connect the serum	5	5	15
33	Management and Control of bleeding in the third stage of labor and postpartum care	5	5	60
34	Management of postpartum hemorrhage	3	3	5
35	Two-handed massage of the uterus	1	1	10
36	Practical training of breastfeeding skills to mothers in neonatal and health practicum/internship	5	5	10
37	Washing and dressing the wound and bandage in nursing & midwifery fundamental practicum/internship	2	2	5
38	Working with autoclave device (sterilizers devices) Washing and dressing the wound in nursing & midwifery fundamental practicum/internship	1	1	5
39	Packing delivery, episiotomy, cervical examination and urinary	1	1	5

	catheterization sets in skill lab			
40	Performing prenatal care in prenatal practicum/internship	5	5	100
41	Micro drip set adjustment and administration of drug for infants and mothers in neonatal and delivery practicum/internship	Each 3	Each 3	Each 10
42	Follow-up of mothers after childbirth and home visits after discharge	1	1	3
43	Working with phototherapy devices, pulse-oximetry and incubator in neonatal practicum/internship	3	3	3
44	Fetal heart monitoring with Pinard, Doppler and monitoring device to gain skills in evaluation of fetal heart and fetal health tests	Each 5	Each 5	10
45	Taking an ECG in an internal and surgical practicum/internship	2	2	2
46	Perform NST and OCT tests	3	3	5
47	Monitor baby's health immediately after normal delivery	2	3	60
48	Observation cesarean section	5	-	-
49	Assist baby care after cesarean section in the operating room	5	5	5
50	Neonatal Cardiovascular Resuscitation (BLS)	2	3	- Pass the resuscitation workshop
51	Neonatal cardiovascular resuscitation (ALS)	2	3	- Pass the resuscitation workshop
52	Adult resuscitation: Maternal cardiovascular resuscitation (BLS)	1	1	- Pass the resuscitation workshop
53	Insertion of gastric catheter (feeding tube) for infants	1	1	2
54	Infusion. injection and monitoring of magnesium sulfate under supervision in cases of preeclampsia	3	3	3
55	Rhogam (anti D) injection for RH negative mothers	2	2	3
56	Vaccination (mother and child)	Each vaccine 2	Each vaccine 2	Each vaccine 5
57	**Performing tests:**			

58	HCT and Hb	1	1	5
59	Blood clotting time and flow	1	1	5
60	Determination of blood type and RH	1	1	5
61	Perform pregnancy tests	1	1	5
62	Performing Fern test in gynecology and labor and delivery practicum/internship	2	2	5
63	Take a slide of cervical secretions and place it under a microscope to diagnose cervical and vaginal infections	2	2	5
64	Sampling for Pap smear	5	5	10
65	Use indicator strips to detect sugar, protein and water bag rupture	1	1	5
66	Preparation of smear from vaginal and breast secretions by necessary methods	3	3	5

Note:

1- All the above skills, in addition to the skills listed in the internship courses on the relevant pages, are acquired under the direct supervision of the instructor and must be completed.

2- The measures that are taken in prenatal care and management of labor are:

Obtaining a history, performing examinations required by a pregnant woman, such as: general examinations and examinations related to movements and heart rate of fetus, anemia, edema, maternal blood pressure, uterine height measurement, fetal weight estimation, Leopold maneuvers , breast examination, estimation of fetal weight , Evaluating the pelvis and pelvimetry, vaginal examination, writing the prescription and giving the necessary tests and interpreting their results and training mother during pregnancy and administering childbirth preparation classes and ...

8- Program implementation strategies (general educational strategies):

Program development strategies are based on the following axes:

- Paying attention to the needs of the community in the field of reproductive health and accountability and responsibility to society/community
- Applying midwifery knowledge up to date
- Paying attention to professional abilities and job duties
- Paying attention to being multi-potential, while respecting the professional boundaries and restrictions
- Emphasizing on prevention and promotion of health and maintaining and returning to the physiological process
- Integrating of teacher-centered and student-centered educational methods
- Emphasizing on active, critical and creative methods
- Training in real professional environments
- Paying attention to self-learning, research-oriented and futurology and futurism

9 - Conditions and manner of student admission:
It will be through the exam and the diploma grade point average.

10- Similar fields in the country:
Similar fields do not exist.

11- Similar fields abroad:
There is a history of midwifery in Asia, such as Iran and Turkey, and in Europe, such as France, the Netherlands and the United Kingdom, and in North and South America, as well as in Australia and New Zealand.

12- Requirements for launching the course:
- According to the criteria required by the Ministry of Health
- Having enough space and equipped classrooms, skill lab and laboratories for midwifery students.
- Having specialized hospitals as well as maternity hospitals where a sufficient number of natural deliveries are performed. It is better for the normal and physiological delivery ward of the hospital to be separate from its high-risk delivery ward. Also, the presence of birth centers near the hospital can be very effective in educating midwifery students.

13. Ethical expectations from learners:
Learners are expected to:
- Observe the charter of patients' rights exactly.
- Strictly observe the regulations related to the protection and safety of patients, staff and the workplace.
- Follow the rules related to dress code.
- Protect the resources and equipment they work with under any circumstances.
- Respect professors, staff, classmates and other learners and participate in creating a friendly and respectful atmosphere in the workplace.
- Observe professional and social ethics considerations when criticizing programs.
- Observe the ethics of research in conducting research.
* Items 1, 2 and 3 are given in the appendices of this program.

14- Job positions of graduates in the health system of the country:
Hospitals, maternity hospitals, birth centers, health centers, related clinics, midwifery offices and home visits.

Second chapter

Course details of Midwifery Curriculum

Course details

Course Name: Bachelor of Science in Midwifery

Course length and structure:

The length of the course and its educational system are in accordance with the educational regulations for undergraduate courses approved by the Ministry of Health. The length of the 4-year midwifery course includes 8 regular semesters and one summer semester.

Type of courses and number of credits and hours:

Type of courses	Hours	Number of credits
Compulsory general courses (core) (Including 2 practice/ practical lab credits)	408	20
Compulsory basic science courses (core) (Including 4 practice/practical lab credits)	411	20
Compulsory specialized courses (core) (Including 16/5 practicum credits and 2 practice/practical lab credits)	1922	73
Optional specialized courses (non -core) (Including 0-2 practice/practical lab credits)	68-129	4
Compulsory internship courses (core)	1071	16
Total	3880-3941	133

1 credit of theoretical courses = 17 hours
1 credit of practice/ practical lab courses = 34 hours
1 credit of practicum courses = 51 hours
1 credit of delivery practicum courses = 72 hours
1 credit of Internship courses = 51 hours
1 credit of delivery Internship courses = 102 hours

Note:

All students, after passing all courses and internships and acquiring at least general and specific skills, must take the final clinical test, which includes all professional skills in the field (labor, delivery and postpartum, prenatal, gynecology, maternal and child health and family planning, neonatology and pediatrics) and get a passing score (at least 12 of each). Success in the exam is essential for graduation. If a student fails the exam, in each section, according to the group director, she will do the necessary internship again and then participate in the exam.

Table A: The general courses of continuous bachelor of midwifery curriculum (BSc)

Code	Title of credit	The number of credits	Types and hours of the course/module			Prerequisite/ concurrent
			theory	Practice	total	
1	Two lessons from the theoretical foundations of Islam	4	68	-	68	-
2	One lesson from Islamic ethics lessons	2	34	-	34	-
3	One lesson from the lessons of the Islamic Revolution	2	34	-	34	-
4	One lesson from the lessons of Islamic history and civilization	2	34	-	34	-
5	One lesson from familiarity with Islamic sources	2	34	-	34	-
6	The Persian literature	3	51	-	51	-
7	The general English language	3	51	-	51	-
8	Physical training 1	1	-	34	34	-
9	Physical training 2	1	-	34	34	Physical training 1
10	History of the culture of Iranian and Islamic civilization	2	34	-	34	-
Total		22	340	68	408	

Table B: The basic sciences courses of continuous bachelor of midwifery curriculum (BSc)

Code	Title of credit	The number of credits			Hours				Prerequisite/ concurrent
		Total	Theory	Prac. lab	Theory	Prac. lab	Practicum	Total	
01	Histology and Cytology	2	1/5	0/5	26	17	-	43	-
02	Biochemistry	2	1/5	0/5	26	17	-	43	-
03	Anatomy 1	2	1/5	0/5	26	17	-	43	-
04	Anatomy 2	3	2/5	0/5	43	17	-	60	03
05	Physiology 1	3	3	-	51	-	-	51	01, 02, 03
06	Physiology 2	2	1/5	0/5	26	17	-	43	04, 05
07	Immunology	2	1/5	0/5	26	17	-	43	02
08	Theoretical Microbiology	2	2	-	34	-	-	34	-
09	Parasitology and Mycology	1	1	-	17	-	-	17	08
10	Practical Microbiology	1	-	1	-	34	-	34	08, 09
Total		20	16	4	275	136	-	411	

Table C: The compulsory specialized courses of continuous bachelor of midwifery curriculum (BSc)

Code	Title of credit	The number of credits				Hours				Prerequisite/ concurrent
		Total	Theory	Prac. lab	Practicum	Theory	Prac. lab	Practicum	Total	
11	Histology and Cytology	1	0/5	0/5		9	17	-	26	01,07,08,09,10
12	Principles of public health services (health 1)	2	1/5	-	0/5	26	-	26	52	-
13	General Pharmacology 1	2	2	-	-	34	-	-	34	02,05, 06
14	Pharmacology 2	1	1	-	-	17	-	-	17	05,06, 13
15	Principles and techniques of nursing, midwifery and working in operating and delivery room	2	1	1	-	17	34	-	51	-
16	Principles and techniques of nursing, midwifery and working in operating and delivery room (Practicum)	2	-	-	2	-	-	102	102	15
17	Biostatistics	2	1/5	0/5	-	26	17	-	43	19
18	General, woman and family psychology	2	2	-	-	34	-	-	34	-
19	Principles of Epidemiology and Disease Control (health 2)	2	2	-	-	34	-	-	34	08,09, 12, 27
20	Specialized English Language	2	2	-	-	34	-	-	34	General English
21	Principles of mother and child nutrition	2	2	-	-	34	-	-	34	02, 05, 06
22	History, ethics, laws and regulation in Midwifery	1	1	-	-	17	-	-	17	27,29,30, 36, 53
23	Law and Forensic medicine in Midwifery	1	1	-	-	17	-	-	17	22
24	Forensic medicine in midwifery practicum	1	-	-	1	-	-	51	51	22, 23
Total										

Table C: Continuous

Code	Title of credit	The number of credits				Hours				Prerequisite/ concurrent
		Total	Theory	Prac. lab	Practicum	Theory	Prac. lab	Practicum	Total	
25	Embryology	2	2	-	-	34	-	-	34	01, 03, 04
26	Genetics	2	2	-	-	34	-	-	34	-
27	Pregnancy and delivery 1-normal pregnancy	2	2	-	-	34	-	-	34	Basic sciences
28	Normal Pregnancy Practicum	1	-	-	1	-	-	51	51	27
29	Pregnancy and delivery 2-normal, safe and physiological delivery, and methods of reducing labor pain	2	2	-	-	34	-	-	34	27, 28
30	Normal Delivery Practicum	2	-	-	2	-	-	144	144	29
31	Pregnancy and Delivery 3- Abnormal Pregnancy and Delivery	2	2	-	-	34	-	-	34	27, 29
32	Normal and Abnormal Delivery Practicum	2	-	-	2	-	-	144	144	31
33	Pregnancy and Delivery 4- medical and surgical diseases in pregnancy and delivery	1	1	-	-	17	-	-	17	27,29, 31, 40-44
34	Neonatology	2	2	-	-	34	-	-	34	25
35	Neonatology Practicum	1	-	-	1	-	-	51	51	34
36	Pediatrics	2	2	-	-	34	-	-	34	34
37	Pediatrics Practicum	1	-	-	1	-	-	51	51	36
Total										

Table C: Continuous

Code	Title of credit	The number of credits				Hours				Prerequisite/ concurrent
		Total	Theory	Prac. lab	Practicum	Theory	Prac. lab	Practicum	Total	
38	Semiology and physical examination	1	1	-	-	17	-	-	17	03-09
39	Semiology and physical examination Practicum	1	-	-	1	-	-	51	51	38
40	Physiopathology and medical diseases 1	3	3	-	-	51	-	-	51	01-10, 38
41	Physiopathology and medical diseases 2	2	2	-	-	34	-	-	34	40
42	Physiopathology and medical diseases 3	2	2	-	-	34	-	-	34	40, 41
43	Physiopathology and surgical diseases	2	2	-	-	34	-	-	34	40-42
44	Medical & Surgical Diseases Practicum	1	-	-	1	-	-	51	51	38-43
45	Communication, health education and counseling in maternal, child and reproductive health (health 3)	1	1	-	-	17	-	-	17	12, 18, 21, 27, 34, 36
46	Maternal, child and reproductive health (health 4)	2	2	-	-	34	-	-	34	45
47	Management and Quality Improvement in maternal, child and reproductive health (health 5)	1	1	-	-	17	-	-	17	12, 45
48	Maternal, child, and reproductive health, and family planning Practicum	2	-	-	2	-	-	102	102	45, 46
49	Principles of psychiatry in midwifery	1	1	-	-	17	-	-	17	18
50	Sexual function disorders	1	1	-	-	17	-	-	17	49
Total										

Table C: Continuous

Code	Title of credit	The number of credits				Hours				Prerequisite/ concurrent
		Total	Theory	Prac. lab	Practicum	Theory	Prac. lab	Practicum	Total	
51	Radiology, sonology and electrology in obstetrics and gynaecology	1	1	-	-	17	-	-	17	27, 29, 31, 53
52	Principles of management and its application in midwifery	2	2	-	-	34	-	-	34	27, 29
53	Gynecology and Infertility	3	3	-	-	51	-	-	51	27, 29, 31, 38
54	Gynaecology and Infertility Practicum	2	-	-	2	-	-	102	102	53
Total		73	54/5	2	16/5	928	68	926	1922	

Table D: The optional specialized (non-core) courses of continuous bachelor of midwifery curriculum (BSc)

Code	Title of credit	The number of credits				Hours				Prerequisite/ concurrent
		Total	Theory	Prac. lab	Practicum	Theory	Prac. lab	Practicum	Total	
55	Nutrition in Maternal and Child Diseases	1	1	-	-	17	-	-	17	21, 53, 33
56	Painlessness, anesthesia and CPR in midwifery	1	0/5	0/5	-	9	17	-	26	13, 14, 27, 29, 34
57	Research methodology and design	1	0/5	0/5	-	9	17	-	26	31, 46, 47, 53
58	Medical information system (information technology in midwifery)	1	0/5	0/5	-	9	17	-	26	-
59	Growth and development	1	1	-	-	17	-	-	17	34
60	Preparing for Childbirth and Physiological Delivery	2	1/5	0/5	-	26	17	-	43	27, 29, 31
61	Implementation of a professional problem-solving plan or research article in midwifery	1	-	1	-	-	34	-	34	31, 46, 47, 52
62	Theory and models in midwifery and Health	1	0/5	0/5	-	9	17	-	17	27, 29, 31
63	Sociology and Social Pathology of Women	1	0/5	0/5	-	9	17	-	17	27, 29, 18
64	Evidence-based midwifery	1	0/5	0/5	-	9	17	-	26	17, 19, 58
65	Complementary and alternative Medicine in midwifery	1	1	-	-	17	-	-	17	27-33, 53, 54
66	Complementary and Alternative Medicine Internship	1	-	-	1	-	-	51	51	65
67	Traditional and herbal medicine in midwifery	1	1	-	-	17	-	-	17	18-33, 53, 54
Total										

Table D: Continuous

Code	Title of credit	The number of credits				Hours				Prerequisite/ concurrent
		Total	Theory	Prac. lab	Practicum	Theory	Prac. lab	Practicum	Total	
68	Reproductive biology	1		1	-	-	17	-	17	05, 06, 25, 27
69	Health Economics Management	1	1	-	-	17	-	-	17	52
70	Client and Patient Education	1	1	-	-	17	-	-	17	29, 45, 46
71	Nutrition before, during and after pregnancy	1	1	-	-	17	-	-	17	21, 34, 35
72	Promoting breast feeding	1	0/5	0/5	-	9	17	-	26	27, 29, 46
73	Midwifery and Reproductive Health in Crises and Disasters	1	1	-	-	17	-	-	17	31, 33, 45- 47, 53
74	Midwifery and Reproductive Health in Urban Health	1	1	-	-	17	-	-	17	31, 33, 45- 47, 53
69′ &74′	Childbearing and family	2	2	-	-	34	-	-	34	27-33, 53, 54
69″ & 74″	Entrepreneurship	2	1/5	0/5	-	26	17	-	43	Semester 4/5 and later
Total		24								

The student is required to choose and pass 4 credits from the table of optional specialized courses (Table D) with the opinion of the educational group. It is strongly recommended that the two credits be “Preparing for Childbirth and Physiological Delivery. Passing 4 credits will be equal to 68 to 129 hours.

Table E: The compulsory internship (core) courses of continuous bachelor of midwifery curriculum (BSc) (2 last semesters)

Code	Title of credit	The number of credits				Hours				Prerequisite/ concurrent
		Total	Theory	Prac. lab	Internship	Theory	Prac. lab	Internship	Total	
75	Normal and abnormal pregnancy Internship	3	-	-	3	-	-	153	153	-
76	Normal and abnormal delivery (1) Internship	2/5	-	-	2/5	-	-	255	255	-
77	Normal and abnormal delivery (2) Internship	2/5	-	-	2/5	-	-	255	255	-
78	Gynaecology and infertility Internship	2	-	-	2	-	-	102	102	-
79	Maternal, child and reproductive health and family planning Internship	2	-	-	2	-	-	102	102	-
80	Neonates who need intensive care Internship	1	-	-	1	-	-	51	51	-
81	Medical and surgical diseases in pregnancy Internship	1	-	-	1	-	-	51	51	-
82	Management and its application in midwifery practicum/ Internship	1	-	-	1	-	-	51	51	-
83	Radiology, sonology and electrology in obstetrics and gynaecology practicum/ Internship	1	-	-	1	-	-	51	51	-
Total		16	-	-	16	-	-	1071	1071	-

Note: If it is not possible for the student to complete 60 independent deliveries after completing the courses, or if the student has not been able to do 60 independent deliveries, the student is obliged to complete the delivery internship again to perform at least 60 independent deliveries under the supervision of the instructor. This additional internship can be done without taking credits or with taking credits in the last summer of the academic period (maximum 6 credits). This internship will include morning, evening (long day) and night shifts.

The education group is responsible for planning this internship. In the case of not obtaining the minimum number of times for other abilities mentioned in Table B of Chapter One of the Curriculum, the same should be done.

Ethical issues

The graduates should,

- Observe the Patient's Bill of Rights[1] when working with the patients.
- Strictly observe Biosafety and Patient Safety Rules* concerning the patients, personnel and workplace.
- Observe the Rulebook for Dress Code[2].
- Strictly observe the Regulations of Working with the Laboratory Animals[3].
- Carefully preserve resources and equipment.
- Truly respect faculty members, the staff, classmates and other students and work for creating an intimate and respectful atmosphere.
- Observe social and professional ethical considerations in criticism.

1, 2 and 3 are contained in the Enclosures.

* Biosafety and Patient Safety Rules will be set out by the Educational Departments and will be available to the students.

Chapter Three

Curriculum of Undergraduate Midwifery Courses (BSc)

Course Code: 01

Course Name: Cytology and Histology

Prerequisite or concurrent: None

Number of credits: 2 credits

Type of credit: 1.5 theoretical credits - 0.5 practical credits

General purpose of the course:

1- Familiarity with natural cells and tissues - Study and observe microscopic details of cells and tissues of healthy organs and how to sample and stain tissues.

2-Scientific and practical application of cell and tissue studies in the field of midwifery services for prevention and diagnosis

Course description: During this course, the student becomes familiar with the basics and methods of general and specific histology and cytology studies, recognizes its types, and is informed about applicability of it in the field of gynecology and obstetrics.

Outline: (43 hours):

A: Theoretical (26 hours)

1. Cytology and general histology:

- Cell, definition and structure
- Cell and nucleus components and the importance of each of them
- The condition of different membranes of adjacent cells and their exchanges.
- Introduction of Histology, epithelial tissue, specific connective tissue (cells, filaments and stem material), glandular tissue and its types, connective tissue types (blood and lymph, cartilage and its growth, bone, bone formation and fracture repair, joints, types of muscular tissues, types of nerve tissue
- Tissues of various organs of the body (gastrointestinal tract, nervous system, circulatory system, organs of lymphatic system, immune system, respiratory system, urinary system, endocrine glands, male reproductive system)

2. Cytology and specific histology:

-Cytology of endometrium, cervicx and vagina (cellular changes during the menstrual cycle and maturation index at different times and familiarity with Pap smear)

- Histology of female reproductive system (ovaries, uterine tubes, uterus, cervix, vulva glands)
- Breast histology
- Histology of placenta and embryonic membranes.

B - Practical (17 hours)

- How to prepare cell and tissue samples
- How to prepare the slide and stain it
- observation of smear (observe normal and abnormal Pap smears). How to preserve tissues (autopsy and biopsy) and send it to the laboratory
- Display of some normal cells and tissues, especially cells and tissues of the urinary tract, genitals, blood cells, placenta and skin

The main references of the course:

1-Cytopathology of female reproductive system, Mehrzad, Mansour, The latest edition.

2- Basic histology, Luiz Carlos Junqueira, José Carneiro, The latest edition

3 - Necessities of basic histology, the latest edition

4- and other valid up-to-date sources

Student evaluation methods in different areas

1. Active presence in the class 2. Participate in the practical exam 3. Participate in the midterm exam

4. Participate in the final exam

Course Code: 02

Course Name: Biochemistry

Prerequisite or concurrent: None

Number of credits: 2 credits

Type of credit: 1.5 theoretical credits - 0.5 practical credit

General purpose of the course:

1- Familiarity with biomolecules of carbohydrates, lipids, amino acids, proteins, nucleic acids

2- Studying the metabolism of biomolecules in body tissues in normal conditions and pregnancy

3- Familiarity with metabolic disorders

Course description: This course introduces the structure metabolism and metabolic disorders of carbohydrate, amino acid protein biomolecules and nucleic acids and nucleotides.

Outline: (43 hours):

A: Theoretical (26 hours)

- The chemical structure of carbohydrates
- The structure of lipids
- The structure of amino acids, proteins, brief description of the properties of water, pH and tampons
- The chemical structure of free nucleosides and nucleotides
- The chemical structure of Vitamins coenzymes and enzymes
- Hormones (chemical structure, classification and mechanism of action)
- Biological oxidation, energy and electron transfer chains
- Cell membranes and transmissions
- Mechanism of digestion and absorption (in short) and carbohydrates metabolization

-Mechanism of digestion and absorption (short) and lipid metabolization

-Mechanism of digestion and absorption (short) and protein metabolization involves, amine group, urea and some of amino acids

- Metabolism of nucleic acids and nucleotides
- Water and electrolytes

-Regulation of metabolism

- Biochemical and metabolism changes in pregnancy
- Electrolytes, proteins, etc in the blood

B - Practical (17 hours)

- Measuring urea, uric acid, creatinine, sugar, fats, iron, sodium, potassium, calcium in the blood

-HBSAb, HBSAg, HIV

- Liver function tests
- Perform complete urine analysis and common blood biochemistry, including measurements of enzymes, electrolytes, proteins, etc. in blood.

The main references of the course:

1- General Biochemistry, The latest edition.

2- Harper's Biochemistry. - Harper, Harold Anthony, The last edition.

Student evaluation methods in different areas

1. Active presence in the class
2. Participation in the practical exam
3. Participation in the midterm exam
4. Participation in the final exam

Course Code: 03

Course Name: Anatomy 1

Prerequisite or concurrent: None

Number of credits: 2 credits

Type of credit: 1.5 theoretical credits - 0.5 practical credits

General purpose of the course: Understanding the anatomy of the head and neck and upper and lower limbs and its application in clinic and clinical cases

Course description: During this course, the student becomes familiar with the structure of the head and neck, upper and lower limbs.

Outline: (43 hours)

A - Theoretical (26 hours):

1- Upper limbs (7 hours): Bones, muscles, arteries, nerves, superficial anatomy, joints, clinical cases

2- Lower limbs (7 hours): Bones, muscles, vessels, nerves, superficial anatomy, joints, clinical points

3- Head and neck (12 hours): Head and face bones, cervical vertebrae, the area of head and neck, neck and facial muscles, visual auditory and olfactory systems. Tongue and the sense of taste, throat and larynx, glands attached to head and neck, arteries, nerves and lymph.

Practical: (17 hours):

In the anatomy hall on the cadaver

the upper limbs (2 hours), lower limbs (2 hours), head and neck (7 hours), female genitalia system with attention to the perineum and pelvic floor muscles (6 hours).

The main references of the course:

1- Lawrence H. Bannister et al. GRAYS ANATOMY New York: Churchill Livingstone. Last edition

2- Sobotta Atlas of human Anatomy /. - Baltimore: Williams & Wilkines, last edition.

3- Pelvic anatomy with clinical points, Abolhassanzadeh, Akram.The Last edition.

4- Anatomy of upper and lower limbs and joints, Elahi, Bahram. TheLast edition

5- Osteology, Tabatabai, Mahmoud.The Last edition.

6- Anatomy of the trunk: chest and abdomen. God, Mars. The Last edition.

7- Descriptive anatomical accelerator, Forouhi, Ali. The Last edition

8- Other reliable and up-to-date sources

Student evaluation methods in different areas

2- Active presence in the class 2- c in the midterm exam 3- Participation in the final exam 4- Doing assignments completely.

Course code: 04

Course Name: Anatomy 2

Prerequisite or concurrent: Anatomy 1

Number of credits: 3 credits

Type of credit: 2.5 theoretical credits - 0.5Practical credit

General purpose of the course: to know the anatomy of the trunk and central nervous system to use it in clinic and clinical cases

Course description: In this course, the student will be familiar with the structure of the trunk (include chest, abdomen, genitourinary systems) and central nerves.

Outline: (60 hours)

A - Theoretical (43 hours):

1. Chest (7 hours): The bones, nerves and lymph of the chest, muscles, pleura, lungs, mediastinum, heart, breast, arteries.
2. Abdomen (14 hours): Abdominal muscles, peritoneum, gastrointestinal tract and its glands, nerves and lymphatic system.
3. Genitourinary system (13 hours): Kidneys, ureter, bladder, urethra, prostate, testis, seminal vesicle, ovary, uterus and its appendages, vagina, external genitalia in both sexes, perineum, arteries, lymph, pelvic structure and its types, and pelvic muscles, nerve and diameters.
4. Nerves (9 hours) Embryology of central nervous system, spinal cord, Pons, cerebellum, cerebellum, brain, ventricles, meninges, arteries, cranial nerves and autonomus neural pathways and blodd circulatory system.

B-Practical: (17 hours): in the Anatomy hall on the cadaver

chest (2 hours) - Abdomen (4 hours) – Genitourinary system (9 hours) - Nerves (2 hours)-

The main references of the course

1. Lawrence H. Bannister et al. The last edition. GRAYS ANATOMY New York: Churchill Livingstone.
2. Sobotta Atlas of human Anatomy /. - Baltimore: Williams & Wilkines, the last edition.
3. Pelvic anatomy with clinical tips, Abolhassanzadeh, Akram, the latest edition
4. Upper and lower limbs and joints, Elahi, Bahram, the latest edition in osteology, Tabatabai, Mahmoud, latest edition
6 Anatomy of chest, trunk and abdomen, Elahi, Bahram, the last edition
7. Descriptive anatomical accelerator, Forouhi, Ali, the latest edition.
8. and other valid and up-to-date sources

Student evaluation methods in different areas

1. Active presence in class 2. Participation in the practical exam 3. Participation in the midterm exam
4. Participation in the final exam

Course code: 05

Course Name: Physiology 1

Prerequisite or concurrent: Biochemistry - Cytology and Histology - Anatomy 1

Number of credits: 3 credits

Type of credit: Theoretical

The general purpose of the course: to fully understand the physiology of different body systems and how it is used in clinical cases

Course Description: This course covers the cell physiology, intra and extra cellular environments, cell transport mechanisms, as well as the physiology of the body involves cardiovascular, respiratory, nerves, and blood circulatory systems.

Outline: (51 hours)

1- Physiology of cell and its environment (10 hours)

Extra and intracellular environments, cell membrane and mechanisms of transport through it, ion distribution, potential of resting, sensible tissue membranes and creating and directing action potential and, comparing them, smooth and striated muscle contraction, strength, contraction, Isometric and isotonic contractions, conduction at synapses (types).

2The cardiac physiology (8hours)

Characteristics of the cardiac muscle (electrical, conduction oxygen supply and consumption) ,Cardiac mechanics; output; sounds and external nerves, the effect of ions and hormones on cardiac function, specific tissue for the transmission of stimuli in the heart, cardiac electrical activity including electrocardiography and its derivation, derivation axes, Einthoven triangle, vector justification, electrocardiogram, real time electric axis vector, rhythm disturbances, ectopic and premature beats, beats.

3- Physiology of blood circulation (9 hours)

Physical laws of blood circulation, factors causing blood flow, arterial circulation and pressure in different vessels, capillary circulation, osmotic and hydrostatic pressures , Starling's law, venous circulation, regulation of cardiac output and its measurement methods, neural regulation of blood pressure ,Hormonal regulation of blood circulation, regulation of blood circulation in heart, brain, skin, muscles viscera, pulmonary and lymphatic circulation, the effect of activity on cardiovascular system and blood circulation, circulatory shock.

4-The physiology of respiratory system (9 hours)

Respiratory mechanics, lung elasticity, pulmonary compliance, role of surfactant, respiratory work (elastic and non-elastic work), lung volume and capacity and their curves, gas laws and the mode of transmission, gas composition, alveolar and blood exchanges Ventilation to blood flow ratio , the way of gas transfer in the blood, gas exchanges in the tissue, respiratory center and its neurological control, hormonal control of respiration, respiration at altitudes, muscle activity and respiration in the fetus, non-respiratory functions of the lungs

5- Physiology of the nervous system (10 hours)

Nervous cells and their types, the five senses, the physiology of spinal cord, brain, cerebellum, balance, thalamic, hypothalamic physiology, cerebral cortex, learning, memory and conditioned

reflexes of retinal system, limbic system, autonomic nervous system, brain waves, regulating body temperature, cerebrospinal fluid, pain and its mechanisms.

6 – The blood physiology (5 hours)

Physiology of blood and hematopoietic tissue, blood composition, physiology of red blood cells, hemoglobin and its role in oxygen and carbon dioxide transport, the white blood cells and inflammation, platelet, homeostasis (blood coagulation), plasma and lymph.

The main references of the course

1- Medical Physiology, Professor Guyton, Arthur, the latest edition.

2- Basic clinical physiology, Green John Herbert, the latest edition.

3- Ganong's Review of Medical Physiology. Ganong, William F.,the latest edition

4- and other reliable and up-to-date sources

Student evaluation methods in different areas

1. Active presence in class
2. Participation in the practical exam
3. Participation in the midterm exam4. Participation in the final exam

Course code: 06

Course Name: Physiology (2)

Prerequisite or concurrent: Physiology 1, Anatomy 2

Number of credits: 2

Type of credit: 1.5 theoretical credits - 0.5 practical credits

The general purpose of the course: to fully understand the physiology of different body systems and how it is used in clinical cases

Course description: During this course, the student will be familiar with the physiology of the endocrine glands and reproductive systems, as much as gastrointestinal tract, kidneys. Also they learn about the regulation of body fluids and blood ph. in the body.

Outline: (43 hours)

A - Theoretical (26 hours)

1- The physiology of endocrine glands (10 hours)

Introduction to the hormones and their mechanism of action - General metabolism of the body, pituitary glands and its secretory hormones - Relations between pituitary gland and hypothalamus - Physiology of thyroid and parathyroid glands, Calcium regulation in the body, pancreas; insulin and blood sugar regulation, physiology of the adrenal gland (cortical and central part and related hormones)

2- Reproductive physiology (6 hours)

Ovarian physiology - Menstrual physiology - Puberty physiology - Pregnancy physiology, Placental physiology, Sex separation - Physiology of childbirth, Physiology of breast development, breastfeeding and lactation - Physiology of menopause - Physiology of testes and puberty in boys - Physiology of prostaglandins

3- Gastrointestinal system physiology (4 hours):

General gastrointestinal movements - chewing and swallowing - gastric and small intestine movements, bowel and anorectal movements and defecation reflex - saliva secretion and chemical digestion in the mouth - gastric secretion and its regulation - Gastrointestinal tract - Pancreatic secretion and its digestive function - Bile and its gastrointestinal function - Intestinal secretion and digestion - Absorption - Hepatic metabolic functions - Dietary balance and effects of vitamins

4- Kidney physiology and regulation of body fluids (4 hours):

Anatomy of kidney and renal blood circulation - Nephrons - Glomerular filtration and its measurement - Tubular mechanisms of plasma clearance - Mechanism of urine dilution and concentration- Self-regulation of renal blood circulation - Comparison of cx Blood and urine components - control of extracellular fluid volume and electrolyte concentration - mechanism of Participation.

5 - Blood pH regulation (2 hours):

pH definition, types of acidosis and alkalosis - compensatory mechanisms - blood buffering effects, the role of respiration and kidney in pH regulation.

B - Practical (17 hours):

ESR, HCT, Hb, CBC -

Bleeding and coagulation time - Platelet count and fibrinogen determination

The main references of the course:

1, Medical Physiology, Professor Guyton, Arthur, the latest edition.
2. Basic clinical physiology. Green John Herbert,the latest edition.
3. Ganong's Review of Medical Physiology. Ganong, William F., the latest edition.
4. Williams Obstetrics. Cunningham, F., Gary. The latest edition of
5. Speroff's Clinical Gynecologic Endocrinology and Infertility,Speroff. The Last Edition
6. Harper’s Biochemistry,the Last Edition.
7. And other up-to-date sources

Student evaluation methods in different areas

1. Active presence in class 2. Participation in the practical exam 3. Participation in the midterm exam
4. Participation in the final exam 5. Doing assignment completely

Course Code: 07

Course Name: Immunology

Prerequisite or concurrent: Biochemistry

Number of credits: 2 credits

Type of credit: 1.5 theoretical credits - 0.5 practical credits

General purpose of the course: Being Familiar with the components and organs of the immune system, as much as their action, immune reactions against infectious agents

Course description: During this course, students will be known about the components and structure of the immune system, its mechanism against various infectious agents and their application in medical diagnoses.

Outline: (43 hours)

A - Theoretical (26 hours)

- Immune tissues and cells including: thymus, spleen, lymph nodes, bone marrow, T and B macrophages, monocytes, eosinophils, neutrophils, basophils, mast cells, Langerhans and dendritic cells, etc.
- Antigen (definition, characteristics and types of antigens)
- Structure, types, production and action of immunoglobulins (antibodies)
- Components of the complement system and how they work
-MHC, HLA and immunogenetic systems
- Humoral immune system responses (antibody production)
- CMI cellular immune system responses
- Tolerance and autoimmune diseases
- Immunity to infectious diseases
- Fertility and infertility (immunological relationship between mother and fetus, immunological and spontaneous abortions)
- Immunology of organ transplantation and immunosuppressive drugs
- Immune deficiency diseases
- Vaccines and vaccinations
- Immune responses against cancerous tumors
-Allergic responses and types

B - Practical (17 hours)

Performing tests related to the field of midwifery, such as pregnancy related diagnostic tests (in blood and urine) – Coombs test - Antibody titration - Counting and measuring cells and other components of the immune system - Cellular deposition - Determination of blood groups to ABO and Rh indirect and indirect ways

- Tests to diagnose pregnancy Gravindex and βHCG -
-Blood groups and RH
-Direct and indirect Coombs and antibody titration determination
-Crossmatch

-Urine tests (culture and complete urin test)

The main references of the course:

2 - Abul Abbas Immunology, the latest edition

2- Kuby Immunology, the latest edition

Student evaluation methods in different areas

1. Active presence in class
2. Participation in the practical exam
3. Participation in the midterm exam
4. Participation in the final exam
4. Doing assignments completely

Course Code: 08

Course Name: Theoretical Microbiology
Prerequisite or concurrent: None
Number of credits: 2 credits
Type of credit: theoretical

General purpose of the course:

1- Being familiar with the c and life of bacteria and viruses, structure and physiology, metabolism and nutrition of microbes, pathogenic properties of microbes, characteristics of important pathogenic microbes with emphasis on nosocomial infections

Course description: During this course, the students will be known about replication and life of bacteria and viruses a, the pathogenesis of microbes and the characteristics of important pathogenic microbes, emphasizing the relationship between microorganisms, hosts and fetomaternal diseases.
Sexually Transmitted Infections (Urinary Tract Infection)

Outline: (34 hours):

1- Bacteriology (24 hours)

A. General bacteriology: shape, size and structure, reproduction, changes; nutrition and metabolism, sterilization, the effect of physical and chemical factors on bacteria, ecology. Epidemiology and pathogenicity of bacteria, sources and ways of infection transmission, body defense against microbes, prevention of infections,

B. The systematic bacteriology: Micrococcal, Streptococcus, nyserysea, Vionasia, Bacillas, Cholesteridium, Lactobacilla, Corynebacterium, Listeria, Anthobacteria, Pseudomonas, Brucellas, Yersinia, Hemophilus, Bordetella, alkaline genesis bacteria, achromobacter, Vibrioillia, Spirasia, Spirasia, Spirasia, Spirochetes, Mycoplasmas, Chlamydia, Rickettsia.

2- Virology (10 hours)

A. General virology: definition, history, structure and propagation properties of viruses. Relationships between virus and host cell, methods of diagnosis, viral diseases, bacteriophages, antiviral medications, classification of viruses.

B. The Systematic virology: influenza virus, common cold virus, arboviruses, tuberculosis viruses, yellow fever virus, dengue virus (rubella fever), rubella virus, measles virus, mumps virus, polio virus, HIV virus, Smallpox viruses, hepatitis viruses, herpes viruses, cancer-causing viruses.

Main references:

1- Jawetz Medical Microbiology. Jawetz, Ernst, the latest edition.
2- Medical Microbiology Murray

Student evaluation method in different areas:

1- Active presence in the class 2- Doing assignments completely 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 09

Course Name: Parasitology and Mycology
Prerequisite or concurrent: Theoretical microbiology
Number of credits: 1 credit
Type of credit: theoretical

General purpose of the course:
Being familiar with the evolution, pathogenesis, diagnosis, treatment and prevention of human pathogenic parasites

Course description: During this course, the students can receive to a general information about protozoan parasites of worms, some arthropods that live as parasites in humans body. also they learn about pathogenesis, diagnosis and treatment and ways to prevent parasitic related diseases.

Outline: (17 hours)
1- Parasitology: (6 hours)
A. Basics of protozoa: Amoebiasis, Giardiasis, Genitourinary trichomoniasis Leishmaniasis, Balantidiasis, Malaria, Toxoplasmosis.
B. General wormology: nematodes, ascariasis, axiom, trichocephaly, trichinosis, pewter, encliostomyosis, strongyloidosis,
Termatodes, fascioliasis, dicrosoliasis, schistosomiasis,
Cestodes, teniazis, heminolipiasis, hydatid cyst.
C- Arthropodology (3 hours):
The most important arthropods of human parasites
2- Mycology: (4 hours)
General mycology, saprophytic fungi, superficial fungal diseases, mucosal fungal diseases. Cutaneous fungal diseases, subcutaneous fungal diseases, visceral fungal diseases, fungal diseases during pregnancy and after childbirth in the genital area.
3Being familiar with laboratory diagnosis tests and observation of sampling, direct testing, culture of parasites and fungi (4 hours)

Main references:
1- Basic medical parasitology. Bran, the latest edition
2- Medical Parasitology, Markle, the latest edition
3- Medical parasitology. Arfa, Fereydoun, the latest edition
4- Medical mycology, laboratory diagnosis and treatment. Shadzi, Shahla, the latest edition
5- and other valid and up-to-date sources
Student evaluation method in different areas:
1- Active presence in the class 2- completing assignments properly 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 10

Course Name: Practical Microbiology

Prerequisite or concurrent: Theoretical microbiology - parasitology and mycology

Number of credits: 1 credit

Type of credit: practical

General purpose of the course:

Being familiar with bacteria and pathogenic viruses and the necessary points about their sampling, cultivation and storage, as well as acquiring the necessary skills to perform sterilization using oven and autoclaves.

Course Description: In this course, the students can identify and recognize the bacteria and viruses necessities about sampling and culture to identify them, different methods of sterilization.

Outline: (34 hours) - Work in the laboratory

1- Safety tips in the laboratory + sterilization (work with oven and autoclave)

2- Being familiar with microscope, method of studying microbes with ordinary and dark field microscope

3- How to prepare the spread, methods of smear, staining and observing of bacteria – preparation of Throat smear + staining smear)

4- Types of Culture medium
method and types of sampling

5- Method of bacterial culturing in liquid و solid environments and mixed isolation

6- Laboratory diagnosis of staphylococci + antibiogram

7- Laboratory diagnosis of streptococcus and pneumococcus

8- Laboratory diagnosis of gram-negative cocci (Niseria) + terponem palidum

9- Laboratory diagnosis of Chrysanthemum bacteria + Lactobacillus + Listeria

10- Laboratory diagnosis of Enterobacteriaceae + Helicobacter + Campylobacter

11- Laboratory diagnosis of Vibrio-Yersinia

12- Laboratory diagnosis of Brucella, Haemophilus

13- Laboratory diagnosis of Bacillus-Clostridium

14- Laboratory diagnosis of Mycobacterium-Actinomycetes

15- Laboratory diagnosis of viruses

Main references:

Kahneman Practical Microbiology, the latest edition

Student evaluation method in different areas:

1- Active presence in the class 2- Doing assignments properly 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 11

Course Name: General and Special Pathology

Prerequisite or concurrent: Cytology and histology - Theoretical microbiology - Parasitology and mycology - Practical microbiology - Immunology

Number of credits: 1 credit

Type of credit: 0.5 theoretical credit - 0.5 practical credit

General purpose of the course:

1- being familiar with cellular degeneration and death, study and observation of microscopic details of abnormal tissues and organs in important organs of the body and how to sample and stain abnormal tissues

2- Scientific and practical application of pathology in midwifery

Course description: In this course, students learn about cellular degeneration and death, tissue inflammation and repair, causes of cell pathology, abnormal tissues and organs in important organs of the body, especially in women, as much as how to give the cellular sample and stain tissues.

Outline:

A. Theory (9 hours)

General:

1- General pathology of cellular degeneration and death

2- Inflammation and repair of tissues

3- Definitions and causes of pathology

4- Mechanisms of cell damage

5- Reversible and irreversible damages

6-The morphology of damaged cell

7- Atrophy - Hypertrophy

8- Hyperplasia - Metaplasia

9- Inflammation, Symptoms of inflammation and major events in inflammation, chemical mediators, acute and chronic inflammation.

10- Edema (definition, its causes and types), congestion

11- Normal homeostasis, thrombosis, diffuse intravascular coagulation. Embolism (pulmonary embolism, amniotic fluid embolism)

12. Susceptibility to cancer and its predisposing factors, cell growth disorders, neoplasms, precancerous disorders, laboratory diagnosis of cancer and tumor markers

Specific:

13- Infectious diseases of female genital tract (Bartolen cyst, vulvar dystrophy, vulvar tumors, vaginal carcinoma, pelvic inflammatory diseases, cellulite and cervical tumors, adenomyosis, tubular tumors, non-neoplastic ovarian cysts, Ovarian tumors.

14- Breast diseases, fibrocystic changes.

B- Practical (17 hours)

1- Being familiar with normal cytology of vagina, cervix, hormonal index along with specific and nonspecific inflammations (4 slides)

Abnormal cytology of the vagina and cervix, including: metaplasia, dysplasia, incite and invasive carcinoma (4 slides)

3- Inflammatory tissue of cervix, cervical dysylasia and INSITU and invasive cancer squamous and glandular cancer, (4 slides) squamous cell carcinoma and adenocarcinoma

4- Evaluation of different phases of endometrium, endometrial hyperplasia (4 slides)

5- Invasive endometrial cancer, choriocarcinoma, mole (4 slides)

6- Uterine leiomyoma, Adenomyosis, Endometrial polyp (4 slides) Leiomyer sarcoma

7- Serous papillary tumor, benign and malignant mucinus (4 slides)

8- Adult and immature teratoma and dysgerminomas, fibromyoma (4 slides)

9- Breast fibrocystic, breast carcinoma, breast fibroadenoma, (total 25 slides)

10- Vaginal discharge test (culture - microscopic observation, Wet smear test, etc.)

Main references:

Robinson's pathology and other reliable updated sources

Student evaluation method in different areas:

1- Active presence in the class

2- Doing assignments properly

3- Participation in the midterm exam

4- Participation in the final exams

Course Code: 12

Course Name: Principles of Public Health Services (Health 1)
Prerequisite or concurrent: None
Number of credits: 2 credits
Type of credits: 1.5 theoretical credits - 0.5 credit of internship

General purpose of the course:

1- Being familiar with the principles of health and health services in Iran and in the world
2- F Being familiar with individual and social health and the relationship between health and community development
3- Being familiar with community health, community midwifery and the role of midwives in ensuring community health

Course description: In this course, Students learn about the principles of health and health services system in Iran and the world, individual and social health and the relationship between health and community health and development.

Outline:

(Theoretical 26 hours):
Definition of health, the role of health and wellness in Islam, the spectrum of health and disease
- Definition of the disease and classification of pathogens, natural course of diseases, risk factors and their concepts, types of prevention and direct and indirect intervention measures.
Determinants of health
Health and social Determinants of health (SDH)
-Equality and equity in Health: Definitions, Principles for Action, Conclusion, Social Factors of Determining the Health, The Root of Inequality in Community Health
- History of social factors that determine health, goals and concepts
- Commission of Social determining factors that of Health of the World Health Organization
- Types of concepts in public and individual health, community health, the role of midwives in community health
- World and Iranian health services supply systems (health care system of the Islamic Republic of Iran, its levels and services of each level)
- Current situation and health issues in Iran and the general population in relation to health
- Prioritization of services
- Important and scientific indicators of measuring community health - How to determine the health needs of the community
- Primary health care, maternal, child health care and its role in community health (principles, philosophy and components) and the role of midwife in it
- being familiar with the health team providing various health services or the family physician team and the role and position of midwives in them at different levels of village and city
And also in the community, health centers and hospitals as well as staff and queue levels
Referral system
- Screening

Levels of prevention

- Global health goals and strategies, introduction of the World Health Organization and other international health organizations

General education: health education and its philosophy, individual and group methods, direct and indirect, health education and its effect on various health programs and people's participation in health affairs

- Midwife as an educator to mothers, family and community
- Environmental health (healthy water, water improvement and related diseases, healthy food, improvement of production and distribution and consumption and foodborne diseases, healthy air, air pollution, diseases).
- Occupational health, especially occupations in which women work, such as hospitals, with an emphasis on midwifery, farms, factories and environments contaminated with harmful substances and toxins, etc.

Internship (26 hours):

- Visiting different levels of the country's health care network, working with offices and Vital Horoscope Visiting environmental health centers and factories, women's employment centers,
- being familiar with the health team and the duties of different levels including the university staff level, city level, health network, health center and health house

Main references:

1- Myles Textbook for midwives, edited by Ruth Bennett, Linda Browm (the Last edition). Edinburgh: Churchill - Livingstone. Last edition

2- The social meaning of midwifery, the Last edition, McMillan publication Sheila Hunt, Anthea symonds.

3- Preventive and social medicine textbook, Park, J, E. Park, K, - the Last Edition.

4- General public health - Sadeghi. Hassan Abadi, Ali The latest edition.

5- Public Health, Seyed Mansour Razavi and Hossein Hatami – the latest edition

6- and other reliable and up-to-date sources

Student evaluation method in different areas:

1- Active presence in the class

2- Doing assignments properly

3- Participation in the midterm exam

4- Participation in the final exams

Course code: 13

Course Name: General Pharmacology (1)

Prerequisite or concurrent: Biochemistry - Physiology 1 and 2

Number of credits: 2 credits

Credit type: theoretical

General purpose of the course:

1- Full acquaintance with general pharmacology (pharmacodynamics and pharmacokinetics and definition of words)

2- c with different forms of drugs and considerations related to their use

3- Being familiar with specific category of medication and their clinical uses

4- Recognition of important side effects and knowledge of necessary measures for patient care (mother and fetus)

Course description: During this course, students will be introduced to the basics of pharmacology and related terms, different forms of some specific medications and how they are used clinically, along with important side effects and considerations related to their use.

Outline: (34 hours):

General pharmacology: Pharmacodynamics (receptor theory - definitions and terminology), Pharmacokinetics (absorption, release, metabolism and excretion), side effects of medications (allergy-idiosyncrasy), drug interactions, changes in response to medications, tolerance in pharmacology, pharmacogenetic

- Types of medication and how to prescribe them
- medication that can effect on the autonous nerves: Generalized autonomous nerves - Cholinergic and anticholinergic medications - Meth sympathetic drugs (adrenergic) - Anti-adrenergic drugs - Glandularg blockers - Neuromuscular blockers (muscle relaxants)
- Arterial antihypertensive drugs
- Diuretics
- Effective medications in cardiovascular diseases: effective drugs in the treatment of heart failure - anti-angina drugs - anti-arrhythmic drugs - anticoagulants - blood lipid-lowering drugs
- Vitamins
- Anti-anemia drugs
- General nervous system and drugs affecting this system: sedatives - hypnotics - antipsychotics - general anesthetics and local anesthetics

Main references:

1- Gaston Pharmacology, Merger, the latest edition

2- Iranian generic drugs. Hemati, Karim. The latest edition

3- Clinical drug information: Iranian generic drugs. Javidan Nejad, Sadegh. The latest edition.

4- Clinical Pharmacology. Sayei, Esmael. theLatest edition

5- Medical Pharmacology - Gut, Anderson, the latest edition.

6-And other reliable and up-to-date sources

Student evaluation method in different areas:

1- Active presence in the class 2- Doing assignmentsproperly 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 14

Course Name: Pharmacology (2)
Prerequisite or concurrent: Physiology 1 and 2 and General Pharmacology 1
Number of credits: 1 credit
Credit type: theoretical

General purpose of the course:

1- Being familiar with different groups of medication prescribed during pregnancy
2- Being familiar with the use of different medication during pregnancy and childbirth and in some gynecological diseases
3- Being familiar with the side effects and dangers of taking medications on maternal and fetal health

Course Description: In this, students can learn about the related topics to various medications s that are used during pregnancy, childbirth and some gynecological diseases related to the mother and fetus along with the life effects and social risks resulting from any of them.

Outline: (17 hours)

- General prescription of medications in pregnancy and lactation
- Chemotherapy medications: Chemotherapy generals - Introduction to antimicrobial medications - Treatment of female genital infections (including bacterial, fungal and parasitic infections) - Common cancers in women - Anticancer medications

treatment of hypertension in pregnancy

- Pharmacological treatment of cardiovascular diseases in pregnancy: Heart failure in pregnancy - Angina pectoris in pregnancy - Arrhythmia treatment in pregnancy - Anticoagulants in pregnancy

Endocrine Pharmacology: General Endocrinology - Corticosteroids - Female Sex Hormones and Gonadotropins
Contraceptives
Ovulation stimuli (infertility treatment)

- medications that stimulate the uterus – medication in preterm labor

Treatment of thyroid disease in pregnancy (hypothyroidism and hyperthyroidism)
Treatment of gestational diabetes (insulin and oral hypoglycemic medications)
medication in epilepsy during pregnancy
Narcotic and non-narcotic analgesics in pregnancy
Lecturer: PhD in Pharmacology

Main references:

1. Gaston Pharmacology, Marger, the latest edition
2- Iranian generic drugs. Hemati, Karim. The latest edition
3. Javidan Nejad, Sadegh. Clinical drug information: Iranian generic drugs. Tehran,the latest edition.
4- Clinical Pharmacology. Sayei, Esmael.the Latest edition
5. Medical Pharmacology, Gut, Anderson, thelatest edition.

6. Comprehensive textbook of official Iranian medicines. Shahraz, Saeed. Iran Pharma,the latest edition
7. and other up-to-date sources

Student evaluation method in different areas:
1- Active presence in the class 2- Doing assignments properly 3- Participation in the midterm exam 4- Participation in the final exams

Course code: 15

Course name: Principles and techniques of nursing and midwifery and working methods in the operating and delivery room

Prerequisite or concurrent: None

Number of credits: 2 credits

Type of credit: 1 theoretical credit - 1 practical credit

General purpose of the course:

1- Being familiar with principles and general techniques of patient care based on physical, psychological and social needs

2- Being familiar with the environment - regulations, equipment and working methods in the operating room and delivery

Course description: During this course, students will become familiar with the general principles and techniques of patient care based on their physical, psychological and social needs, as well as Being familiar with the equipment and methods of work in the operating and delivery room.

Outline: (51 hours):

A: (17 theoretical hours)

1- Principles and techniques of nursing

- Health and disease
- Basic human needs
- Being familiar with the concepts of pain, stress, sleep and death
- Cognition the different types of hospitals and its organizational chart
- Gaining the Skills in clinical communication
- Patient hospitalization, transferring and discharge
- Patient environment
- Written and oral report
- Infection control and disinfection
-Vital signs
- Skin, hair and oral hygiene
- body mechanics Principles (cognition the types of movement needs- types of positions - the dangers of immobility and the principles of wound care
-Nutrition: Types of treatment regimens, types of nutrition (gavage, T.P.N)
- Nursing process
-Intestinal and urinary excretion (enema, catheterization, sampling, etc.)
- Application of cold and heat
- Oxygen therapy, suction
- Medication: Being familiar with weights, scales, calculating the amount of used drugs, acronyms and…
- Injections: ID, SC, I.M - I.V.
- Transfusion
- necessary Cares before and after surgery

2- Principles and techniques of midwifery

- Being familiar with the midwifery profession
- Definition of midwife, characteristics, responsibilities and midwife's skills
- Definition of pregnancy and pregnant woman
-Being familiar with common midwifery idioms
- Work environment of midwife: Being familiar with the building of the delivery ward, clinic and…
- Health and safety in the workplace
- Sterilization and aseptic methods in the delivery and operation room
-Hospitalization and discharge of pregnant and postpartum women
- Mini Prep and shave
- Enema in labor
- Bathing and washing of the vulva and perineum (before vaginal examination - before and after delivery - after episiotomy and perineorrhaphy)
- Bladder catheterization in pregnant women
- Principles of movement of pregnant women: transferring, positions during labor and delivery
- Hand cleaning before childbirth (massage method and ….)
- Wearing scrubs, gloves and taking it off
- Covering women with surgical drapes during gynecological examination and childbirth and ….

-Midwifery skills related to the infant: identification, relocation, suction - umbilical clamp - measurement of height, weight, head circumference and … - temperature, bathing, dressing and discharge.

- Being familiar with the tools and their application in obstetric, gynecological and neonatal examinations such as inserting IUD, delivery, perineorrhaphy, resuscitation and ....

3- Operating room

- Being familiar with the concepts of gynecological surgery
- Being familiar with the building, organizations and duties of operating room staffs (mobile nurse, scrub, etc.)
- Being familiar with operating room equipments and types of surgical sutures and their application
- Being familiar with gynecological operating room sets: cesarean section - curettage - cutdown, hysterectomy and…
- Being familiar with the principles of operating room disinfection and sterilization of operating room equipments and solutions
- The correct method of preserving the sample in surgery
- Gynecological surgery positions
- Perp and drape
- Checking and opening surgical sets
- Scrub
- Wearing scrubs and gloves with emphasis on the closed method

Note on the method of implementation: At the discretion of the midwifery group, some cases in the internship period can be presented in the operating room of the maternity and gynecology ward by considering the appropriate time as the theory and internship credit.

B- Practical credit (34 hours)

Practical work related to the abovementioned is determined in the classroom or in the nursing and midwifery training room with the opinion of the relevant instructors

Attention:

- It is necessary to explain that it is better to hold a 4-hour practical session in the practice room after 2 hours of theory class, in which after explaining and practicing everything, students will have enough time to practice and solve problems and gain skills.
- Considering the fact that teaching, learning and evaluating of some practical work requires real conditions and simulation facilities are not sufficient, some actions can be learned only in the internship of this course. Thus, after training, evaluation should be done mostly practical, when not possible, verbally.

Main references:

1- Potter, patricia Ann; Perry, Ann Griffin. Fundamentals of nursing: concepets, Process, and practice, th. ed. - st. Louis: Mosby (last edition)

2- Timby, Barbara K. (last edition). Founded skills and concepts in patient care Philadelphia: lippincott (last edition).

3- Taylor, carol etal. Fundamen, Tals of Nusing Philadelphia: lippincott (last edition).

4- Cole, Grace. (last edition). Fundamentals Nursing concepts and skills. St. louis: Mosby.

5- Reeder Sharon, et al. Maternity Nursing: Family, Newborn and Womens Health, (last edition)

6- Philadelphia: Lippincott. Gorrie, Trula Myers. Foundations of Maternal Newborn nursing.
Znd ed. Philadephia: W.B. Saunders. (last edition)

7- Nursing and health of mothers and infants, Mehri, Farkhondeh, latest edition

8- Talors Clinical Nursing Skills: Nursing Clinical Skills, Taylor, Carol et al., Latest edition

9- Working method in operating room and recovery room, Ghobraei, respected, latest edition.

10- Clinical Nursing Methods, Mousavi, Maliheh Sadat, Rafiei, Forough. The latest edition.

11- Principles of Patient Care (Comprehensive Attitude and Nursing), Dogas, latest edition

12- and other reliable up-to-date sources

Student evaluation method in different areas:

1-Active presence in the class

2- Participation in the midterm exam

3- Participation in the final exams

4- Participation in the practical exam

Course Code: 16

Course Name: Principles and techniques of nursing, midwifery and working in operating and delivery room (Internship)

Prerequisite or concurrent: course of principles and techniques of nursing and midwifery and working methods in the operating room and labor (theoretical-practical)

Number of credits: 2 credit

Credit type: Internship

General purpose of the course:

1- Familiarity and implementation of general principles and techniques of patient care based on patient physical, psychological and social needs

2- Being familiar with the environment, regulations, equipment and working methods in the operating and delivery room.

Course Description: During this internship, students apply their theoretical and practical knowledge to the patient under the supervision of an instructor.

Outline: (102 hours):

1- Being familiar with the medications of the ward and how to give the medicine using the file, card and cardex.

2- Familiarity and performing I.M and I.V injections, serum, etc. and gaining skills in this field

3- Familiarity and performing bandage

4- Being familiar with patient admission and discharge and issuance of birth certificate

5- Being familiar with the equipments and how to work in the delivery and operating room, hand washing, scrub, etc.

6- Performing general patient care

7- Prevention and bed sores treatment

8- Proper communication with the patient and emotional support of the patient

24 days (4 hours and 1.2 a day with 15 minutes of rest) 2 days in the operating room (you can do more days)

Measuring the height, weight, head and chest circumference of the neonate	Suction of mouth, nose, throat in different ways and how to work with suction device	Oral care
Observing the professional behavior of the midwife in the delivery room	How to place the airway and care for artificial passages and observe placing the endotracheal tube	Making closed and open bed
Preparing the patient for the operating room	Performing 5 cases of bondage, sterile compress	Moving the patient from the bed to the wheelchair and the stretcher and vice versa
Sterilizing equipments and fabrics (Autoclave and oven)	Washing infected wounds	Positioning the patient (different types)
hand washing	Removing sutures	Giving active and passive

		exercises
Wearing scrubs and mask	bandage	blood pressure Control and recording
Wearing gloves	Oral medication	Breathing control and recording

observing all types of pliers, needles and cloth accessories related to surgery	Giving medication or intramuscular injection in 5 cases	Pulse control and recording
Preparing the patient for the operating room	giving medication or intravenous injection in 5 cases	Temperature control (A. O. R) and recording
Disinfecting the room	giving medication or subcutaneous injection in 2 cases	admission of the patient in the ward
Intraoperative care	Intradermal test in 1 to 2 cases	Control I, O and recording it
Postoperative care	Inserting intravenous catheter and serum and its care and how to calculate and combine drugs in 5 cases	Inserting a washbasin and taking a stool sample (simple and culture)
observing recovery room equipments	Eye, ear, nose drops	Urine sampling (simple, culture)
Admission of the patient from the recovery room	Suppository (vaginal, rectal)	enema
Observing the operating room environment and how to work in it	Taking a blood sample	Bladder wash
observing different types of operations (at least 2 cases of cesarean section)	Connecting blood and its derivatives and related care	Urine glucose, acetone and protein control
Caring for the corpse	Patient discharge, patient and family education	Cold and dry compresses (non-sterile)
Observing the environment and equipments of labor and delivery and postpartum room	Educating the patient	Hot and dry compresses (non-sterile)
observing how to work with Bennett device	Bathing in bed (full / with patient assistance)	Isolated patient care (respiratory, contaminated blood, contaminated feces)
Observing how to work with infant CPR units or devices in delivery room	Bathing in shower and bathtub	mouth feeding
Recording the care provided and the patient's condition in the files and booklets	Massage the pressure points	Stomach catheterization
Checking the patient's file in terms of different parts	Washing the head and taking care of the infected head	gavage
Checking the types of files in the ward	Perineal wash	lavage
Participating in questions and answers and study	Providing comfort, rest and sleep for the patient	Bladder catheterization

theoretical topics determined by the instructor	Bathing the infant (can be done in infant internship)	Oxygen therapy (catheter, mask, cannula)

Main References:

1- Potter, patricia Ann; Perry, Ann Griffin. Fundamentals of nursing: concepets, Process, and practice, th . ed. - st. Louis: Mosby (last edition)

2- Timby , Barbara K. (last edition). Foundamental skills and concepts in patient care Philadelphia: lippincott (last edition).

3- Taylor, carol etal. Fundamen, Tals of Nusing Philadelphia: lippincott (last edition).

4- Cole, Grace. (last edition). Fundamentals Nursing concepts and skills. St. louis: Mosby.

5- Reeder Sharon, and etal. Maternity Nursing: Family, Newborn and Womens Health, (last edition). Philadelphia: Lippincott. Gorrie, Trula Myers. Foundations of Maternal Newborn nursing. Znd ed.

Philadephia: W.B. Saunders. (last edition).

6- Nursing and health of mothers and infants, Mehri, Farkhondeh, latest edition

7- Talors Clinical Nursing Skills: Taylor, Carol et al., Latest edition.

8- Working method in operating room and recovery room, Ghobraei, respectable, latest edition.

9- Clinical Nursing Methods, Mousavi, Maliheh Sadat, Rafiei, Forough. Tehran: Last Edition.

10- Principles of Patient Care (Comprehensive Attitude and Nursing), Dogas, latest edition

11- Other reliable up-to-date sources

Student evaluation method in different areas:

1- Active presence in the intership

2- 2- how to do the assignments during intership period

3- 3- Participation in the final practical exam

Course Code: 17

Course Name: Biostatistics

Prerequisite or Concurrent: Principles of Epidemiology and Disease Control (Health 2)

Number of credits: 2 credits

Type of credit: 1.5 theoretical - 0.5 practical credit

General purpose of the course:

1- Being familiar with common research methods in medical sciences

2- Ability to collect and express statistical information

3- Being familiar with statistical inference in order to fully understand research articles

4- Ability to conduct medical and health research

Course description: During this course, students become familiar with the concepts of research, its types and different stages, and understanding statistical inference in order to fully understand research articles in medical and health matters.

Outline: (43 hours):

A: Basics of the research method and application of statistics in it (8 hours):

1- The concept of research and its types

2- Different stages of a research (problem statement, goal writing, research question and hypothesis, etc.)

3- Types of variables, types of epidemiological studies, types of populations, types of sampling methods.

4- Types of data, methods of collecting information and types of validity and reliability

5- Classifying information and expressing them by tables and graphs

B: Critical statistics (18 theoretical hours + 17 practical hours):

1- The concept of probability and the expression of its simple rules

2- Distribution of binomial and its application in medical sciences

3- Distribution of time and Poisson and its application in medical sciences

4- Normal distribution and its application in medical sciences and sample probability distribution - Probability distribution $\bar{x}$ and probability distribution p

5- The central limit theorem, estimating the limits of trust and the mean and ratio of estimating the number of samples and its basis.

6- Concept of hypothesis, statistical test, first and second type errors

7- The order of performing some important statistical tests that are mostly seen in medical articles. Difference and ratio test of a fixed number, mean difference test and two ratios.

8- The concept of correlation between two situations and the method of examining it in quantitative and qualitative pages (test correlation coefficient, zero-correlation coefficient, agreement tables)

9- Statistical review of selected medical and midwifery articles.

Main references:

1- Statistical methods and health indicators, Dr. Kazem Mohammad, latest edition.

2- Statistical methods in research sciences. Dr. Shariatmadari Mohammad Taghi, latest edition

3- Research in health systems of the Ministry of Health. Dr. Shariatmadari Mohammad Taghi, latest edition
4- Social prevention medical textbook. Park. JI, (vols. 1-4) latest edition.
5- Vital statistics and indicators. Dr. Malek Afzali Hussein, latest edition
6- Statistics. Dr. Ayatollah Mohammad Kazem, latest edition
7- Research methods and its application. Dr. Sadeghi Hassanabadi, Mohammad, latest edition
8- Research method in medical sciences. Dr. Azizi Fereydoun, latest edition
9- Other reliable up-to-date sources

Student evaluation method in different areas:

1- Active presence in the class
2- 2- how to to the assignments
3- 3- Participation in the midterm exam
4- 4- Participation in the final exams

Course Code: 18

Course Name: General, Woman and Family Psychology
Prerequisite or concurrent: None
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course:

- Familiarity and cognition of the basic concepts of psychology and social psychology and gaining skills in applying these principles in relation to the client and family
- Adequate cognition of the social conditions of the living environment affecting behaviors
- Recognizing the relationship between the structure and organization of society and health problems related to the profession
- Being familiar with normal and abnormal social behaviors
-Being familiar with various behavioral disorders and social deviations and family misbehavior
-Being familiar with social pathologies, especially in women

Course description:

This course teaches general topics in the field of general and social psychology and the student passes this course while getting familiar with the basic concepts of psychology with the interaction of physical and mental behavior and the factors affecting it, emotional behaviors and its causes, and behavioral abnormalities and deviations.

Outline: (34 hours):

A- General psychology including:

1. History, definitions, types and purposes of psychology
2. Psychology from the perspective of Islamic scholars (Kennedy-Farabi-Ibn Sina-Ghazali)
3. Biological foundations of psychology
4. Psychological concepts include: mental development - personality - intelligence - memory - learning - emotions - basic motivations - psychological behavior - dependence and addiction
5. Psychology of girls' puberty
6. Stress, emotional behavior and emotions control
7. Social Behavior - Social interaction
8. Psychology of Abnormality
9. Conflict, failure and incompatibility

B- Psychology of women and family including:

1. Psychological theories about the family
2. Psychological and behavioral differences between girls and boys
3. The concept of attachment of mother and child and its biological principles
4. Principles of mother-child relationship and principles of parenting
5. Couple relationships
6. Sexual mental health of women
7. Family misbehavior (with children, spouse and the elderly)

8. Divorce - remarriage and single-parent family

Main references:

1- Atkinson & Hilgard's Introduction to Psychology, R.L. Translators, Mohammad Naghi Barahani and others. Roshd Publications.
2- Morris, C.G. & Maisto, A.A. (the latest edition). Introduction to Psychology. Prentice Hall College.
3- Kala, J.W. (the latest edition) Introduction to Psychology. Wadsworth Cengage Learning
4- Pinsof, W.M. & Lebow, J.L. (the last edition). Family Psychology. The are of the Science. Oxford University Press.

Student evaluation method in different areas: written exam and participation in class activities

Course Code: 19

Course Name: Principles of Epidemiology and Disease Control (Health 2)

Prerequisite or concurrent: Principles of public health services (health 1) - Theoretical microbiology - Parasitology and mycology - Pregnancy and Delivery 1 Normal pregnancy

Number of credits: 2 credits

Credit type: theoretical

General purpose of the course:

1- Familiarity of students with common terms in epidemiology and prevention medicine

2- Familiarity of students with the causes and spread of diseases in society

3- Obtaining specific information about the epidemiology of some common diseases in the country

Course description: During this course, the student is introduced to the definition of epidemiology, its common terms, various methods of epidemiological studies, causes and factors affecting the creation and spread of a problem or disease, and the epidemiology of various diseases in children and adults.

Outline: (34 hours):

1- Definition of epidemiology, ecological approach to diseases

2- Common words in epidemiology

3- Classification of pathogens (physical, chemical, biological, etc.)

4- The role of different factors in causing diseases (host, pathogen, environment, etc.)

5- Physical and chemical factors of biological and social environment

6- Prevention and its various stages

7- Basics and types of epidemiological studies (briefly)

8- Epidemics and how to study them (how to collect information, classify and display them according to time, place, person) Use of statistics in epidemiology

9- Screening

10- Epidemiology and control of preventable disease by vaccine and their immune mechanism - vaccine development, maintenance, cold chain and how to use

Overview of integrated child care:

11- Integrated care of a healthy child

12- Integrated care of children's diseases

Epidemiology and control of pediatric diseases:

13- Definition, importance, epidemiology, pathology of diarrheal diseases (diarrhea due to Escherichia coli, and cholera and diarrhea due to vibrio, parasitic diarrhea and infections caused by Salmonella, Shigella ... - Definition and types of hydration dose and diagnose of its degrees by Observation, touch, weigh)

Treatment of diarrhea with regard to prevention and treatment of dehydration (intravenous and Oral serums, ORS and reasons for the effect, how to use it, diets and the role of antibiotics and anti-diarrheal drugs)

prevention, control and education of health, food hygiene, improving the environment and fighting flies, etc.

14. Definition, importance, epidemiology, pathology of respiratory diseases and respiratory infections - types, treatment, nutrition, prevention and control and health education
15- Definition, importance, epidemiology, pathology of ear, nose and throat infections - types, treatment, nutrition, prevention and control and health education
16- Definition, importance, epidemiology, pathology of growth and developmental disorders - types, treatment, nutrition, prevention and control and health education
17. Definition, importance, epidemiology, pathology of anemia - types, treatment, nutrition, prevention and control and health education

Epidemiology of major adult diseases:

18- General information about some important diseases such as (tuberculosis, Malta fever, malaria, AIDS, hepatitis, sexually transmitted diseases and high-risk behaviors)
19- Epidemiology and control of non-communicable diseases and related risk factors (cancers, rheumatism and heart diseases, diabetes, hypertension, osteoporosis, musculoskeletal disorders, accidents, etc.) - Menopause
20- General information about some specific diseases in Iran (rabies, leprosy, etc.)

Main references:

1- Authentic and up-to-date sources of epidemiology
2- Principles of epidemiology. Mazner, Judith Sen. The latest edition
3- Integrated care of a healthy child (especial for non-physician) of the Ministry of Health
4- Medical, Prevention and Social Textbook (Vol. 1-4), Park, G.I. The latest edition
5- Gordis Epidemiology, latest edition
6- Integrated care of pediatric diseases (especial for non-physicians), Ministry of Health, Deputy of Health, Family Health Office, Children Department

Student evaluation method in different areas:

1- Active presence in the class
2- 2- how to do the assignments
3- 3- Participation in the midterm exam
4- 4- Participation in the final exams

Course Code: 20

Course Name: Specialized English Language
Prerequisite or concurrent: General English language
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course:

1- Familiarizing the student with texts and scientific sources and necessary words and terms and prefixes and suffixes in relation to medical and midwifery words
2- Ability to understand concepts and use scientific books and journals related to the profession in order to improve the level of professional knowledge

Course description: By passing this course, students will become familiar with scientific texts, words and specialized terms of their profession in order to benefit from scientific books and magazines.

Outline: (34 hours):

- Introduction to Common Medical Abbreviations - Common Medical Suffixes and Prefixes (E.S.P. Book)
- Correct use of vocabulary, reading scientific texts related to midwifery with appropriate speed and understanding of concepts and principles, correct writing of medical words and terms
- Translation and summarizing of midwifery scientific texts

Main course references:

Specialized books on midwifery and women and scientific articles on midwifery
1 - English in basic medical sciences
2 - Focus Series

Student evaluation method in different areas:

1- Active presence in the class
2- How to do the assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course code: 21

Course name: Principles of mother and child nutrition
Prerequisite or concurrent: Biochemistry and physiology 1 and 2
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course:
1- Familiarity with the importance and role of proper nutrition in ensuring the health of the individual, especially mother and child according to economic, social, health and cultural criteria
2- Recognizing proper nutrition and recognizing the symptoms of malnutrition in mother and child
3- Evaluating the nutritional status during pregnancy and lactation.
4- Nutrition education for different periods, especially pregnancy, lactation, infants, children and prevention of malnutrition in mother and child

Course description: During this course, the role of proper nutrition in ensuring the health of the individual, especially mother and child, is explained. In this regard, students are familiar with nutrients, nutritional status, nutrition at different ages, nutritional diseases and nutrition of vulnerable groups.

Outline: (34 hours):
A: Principles of nutrition:
Chapter1: Defining the Concepts and Importance of Nutrition Role and Importance (3 hours)
- Major nutrition issues and problems in Iran and the world - The importance of nutrition in health and community health and its relationship with economic, social and cultural factors and major nutrition issues in Iran and the world.
- The importance and relationship between nutrition science and midwifery expertise and the application of nutrition science.
- General principles of nutrition, goals, history, definitions, chemical composition of the body.
- Understanding the culture, traditions, eating habits of the region in relation to the nutritional status of the individual and society

Chapter 2: Nutrients and its main sources (9 hours)
- Proteins, carbohydrates, fats
- Energy, energy definition, measurement methods and energy needs, energy balance
- Water, salts and vitamins
- Complications and deficiencies and high consumption of any of the nutrients and the use of food to solve problems or diseases such as malnutrition, anemia and ...

Chapter 3: Preparing foods and general principles of nutrition and diet planning (3 hours)
- Food groups
- Uses and how to use food tables and substitute lists FAO WHO, RDA,
- Raw and cooked food tables

Side effects of deficiency and excessive consumption, balanced diet

Chapter 4: Principles of Food Preservation and Food Poisoning (3 hours):

- Principles and methods of food preservation in terms of maintaining food health and their nutritional value

Food Loss Process - Food Hygiene and Poisoning, Common Food Poisoning in Infants and Children

Chapter Five: Nutrition Assessment Methods (3 hours):

Clinical review of nutrition status

Anthropometric examination

- Study of food consumption
- Socio-economic study

B: Nutrition of mother and child

Nutrition at different stages of life

- Nutrition during pregnancy (4 hours)
- Nutrition in infancy (2 hours)
- Feeding the baby (2 hours)
- Adolescent nutrition (2 hours)
- Adult nutrition (1 hour)
- Nutrition in the elderly (2 hours)

Main course references:

1- Mahan L. Katbleen, Escott, Sylvia - Krause's Food, Nutrition & Diet Thrapy. Printed in the United States of America U.S.A. (last edition)

2- Human Nutrition and Dietotics (J.S. Garrow - W.P.T. James) last edition

3- Basic Nutrition and Diet therapy (sue Rodwell williams) last edition

4- Dudek, Susan G. Nutrition Essentials for Nursing practices (last edition). Philadelphia: Lippincott.

5- Nutrition during pregnancy, infancy and childhood, Forouzani Minoo, latest edition.

6- Infant nutrition based on physiological principles, Parsa, Susan, Deputy Minister of Research, Ministry of Health, Treatment and Medical Education,

7- Food industry, Maleki, Morteza. Dokhani, Shahram The latest edition

8- Basics of nutrition, Guthrie, Helen Andrews. The latest edition.

9- Integrated care of pediatric diseases (especially non-physicians), Ministry of Health, Deputy of Health, Family Health Office, Children Department

10- Improving the growth and nutrition of children, Ministry of Health, Deputy Minister of Health, Office of Community Nutrition

11- National Guide to Nutrition during Pregnancy and Breastfeeding, Ministry of Health, Deputy Minister of Health, Population and Family Health Office, Nutrition Improvement Office

12- Breastfeeding children, Isfahani, Mohammad Mehdi, latest edition

13- and other reliable up-to-date sources

Student evaluation method in different areas:

1- Active presence in the class 2- completing assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 22

Course Name: History, Ethics, Laws and regulation in Midwifery

Prerequisite or concurrent: Pregnancy and Delivery 1 and 2 - Gynecology and infertility, Pediatrics, Normal Delivery Practicum

Number of credits: 1 credit

Credit type: theoretical

General purpose of the course:

1- Familiarity with the history of midwifery in the world and Iran and the developments of the midwifery profession in recent centuries

2- Familiarity with moral and spiritual criteria and its application in personal and professional life

3- Familiarity with the rules and regulations of midwifery (Iran and the world) and relevant legal organizations

4- Familiarity with the legal responsibilities of a midwife

5- Familiarity with Islamic penal laws in the field of midwifery violations

6- Familiarity with organizations, communities and midwifery associations (Iran and the world)

6- Familiarity with reproductive health rights

7-

Course description:

During this course, students will get familiar with the history of midwifery in Iran and the world, the evolution of the profession over the last few centuries, the formation of organizations and associations related to the profession, ethical issues, rules and regulations in midwifery, as well as legal responsibilities of midwifery. The relevant punishment in case of violations as well as reproductive health rights will be known.

Outline: (17 hours)

1- Midwifery history: (4 hours)

The evolution of obstetrics and gynecology from the beginning of human life, midwifery before the history and the era of Hippocrates, before and after the birth of Christ in the Middle Ages - before and after Islam Family and ... - Modern midwifery in today's world

The evolution of midwifery in Iran, including the Middle Ages and the Renaissance (during the time of Ibn Sina or Ali ibn Abbas Ahwazi, before Safavid and after Safavid, 20th and 21st centuries, after the Islamic Revolution - the emergence of formal midwifery education and schools and colleges (governmental and non-governmental) Establishment of midwifery department in the Ministry of Health and its role, duties and activities - Role and share of midwifery in various departments of the Ministry of Health and health programs and service packages, etc. regarding midwives

Changing attitudes in the field of fertility issues, including medicalization (Demedicalization) and normalization of reproductive events with the design of medical approach and midwifery approach in fertility services

2- Ethics, rules and regulations in midwifery: (10 hours)

- Definition of ethics - value and importance of ethics - different theories of scientists and philosophers about ethics and Islam's opinion about ethics

- Definition of profession and profession of midwifery - International laws of ethics - Midwifery ethics, moral guarantees (piety, faith, self-sacrifice, commitment and responsibility for truth in speech and behavior, humility and moral humility in action, politeness and self-control, loyalty, spirit of service Dynamic human relationships in emotional support, information, etc., as well as education about mothers, family, community and colleagues.

Legal aspects of professionalism and professional duties: including job responsibilities such as punctuality, discipline, uniforms, etiquette, etc., keeping records, patient records, registration of examinations and reports, orders, informing the doctor, referral, negligence incidents And negligence, protection of property, observance of the principles of nosocomial infections as well as legal matters such as testimony, will and statements of the mother before death, confidentiality and professional secret and its philosophy and its legal limits

- The legal importance of occupational offenses and crimes in midwifery and its punishment
- Description of legal and approved duties of midwifery in different workplaces (hospitals, health centers, office and home, centers such as infertility and counseling centers and triangular clinics, etc.)
- Management duties as a manager Compared to other countries Advanced
- Employment laws and contracts and breach of contract (public, private and charitable centers, etc.)
- Work abroad

Familiarity with women's religious issues and related rulings

3- Midwifery and legal organizations and associations related to the profession: (1 hour)

- Organization of the medical system and the presence of midwives in it in order to have a professional midwifery system (effects, benefits, criticisms, etc.)
- Forensic medicine organization and how midwives communicate with it (midwifery violations, testimony, forensic midwifery, etc.)
- Iranian Midwifery Association before the Revolution and the Iranian Midwifery Population and the Iranian Scientific Midwifery Association after the Islamic Revolution
- Familiarity with other related associations that midwives are members of and can be, such as family planning association, medical education association, etc., as well as familiarity with other related public and charitable associations
- International Confederation of Midwives (ICM) and its role, benefits and activities, familiarity with other relevant international organizations such as WHO, UNFPA, UNICEF, ..., FIGO, ICN, and ...

4- Reproductive health rights: (2 hours)

- Human rights in the field of marriage, sexual issues, pregnancy and childbearing, family planning, parenting, child rights, etc. at the international and domestic level
- Reproductive rights of individuals in gamete donation, rented uterus, cloning, etc., the details of which are forensic medicine and midwifery.

Main course references:

Books of ethics and regulations for midwifery, as well as books of medical and nursing ethics, as well as the Islamic Penal Code, description of approved duties of midwives, statutes of medical system organizations, scientific association and midwifery population of Iran, websites of international organizations, government regulations and circulars on duties and Midwifery services and midwifery management issues and other valid matters in the opinion of the relevant professor

Student evaluation method in different areas:
Active presence in class - doing homework - final exam

Course Code: 23
Course Name: Law and Forensic Medicine in Midwifery
Prerequisite or concurrent: Concurrent with history, ethics, law and regulation courses
Number of credits: 1 credit
Credit type: theoretical

General purpose of the course:
Familiarity with forensic topics related to the midwifery profession and the duties and responsibilities of midwives in this field

Course Description: During this course, the student will be introduced to the definition and various issues of medicine and midwifery, legal roles, duties and responsibilities of midwives in this field and their responsibilities to society.

Outline: (17 hours)
1- Basics of forensic medicine: definition of forensic medicine, duties and responsibilities of forensic medicine, structure and organization of forensic medicine
2- Medical and midwifery responsibilities: definition and its types, moral responsibility, oath, physical responsibility, criminal responsibility and employment responsibility
3- Medical and midwifery negligence and misconduct: Definition of medical and midwifery negligence and errors - Legal types of medical and midwifery negligence, criminal types - errors leading to death, errors leading to organ violation or complication and injury and errors leading to loss of other authorities' rights - Law Islamic punishment and types of punishments and legal materials regarding the mentioned errors
4- Conditions of non-responsibility of physicians and midwives, conditions of medical and midwifery negligence, effective factors in complaints about medical and midwifery, consent and acquittal, informed consent, subject of legal consent, types of consent, necessary conditions for obtaining consent and exceptions in medical and midwifery certificates
5- Types of medical and midwifery certificates, death certificates, birth certificates, how to issue birth and death certificates, principles of certificate writing and punishment for false certificates
6- Confidentiality, types of secrecy, punishment for disclosing patient secrets in unnecessary cases
7- Mortology, definition and types of death, diagnosis of death and changes after death
8- Pregnancy, legal definition of pregnancy, the importance of pregnancy diagnosis from the point of view of forensic medicine, death during pregnancy, deaths during childbirth, deaths related to pregnancy
9- Fetal death during pregnancy or intrauterine death, diagnosis of elapsed time of fetal death inside the uterus, fetal death during childbirth and neonatal death after delivery and diagnosis of the cause, ability of the fetus to live outside the uterus, diagnosis of stillbirth and stillbirth, Determining fetal age and embryo necropsy
10- Abortion: Definition, types of abortion from legal point of view, spontaneous abortion, traumatic abortion, criminal abortion, medical abortion, maternal indications for abortion and fetal indications for abortion and methods of abortion

11- Legal materials regarding criminal abortion, fetal blood money and its legal compliance with fetal age
12- Violence against women and children and its forensic issues: spouse abuse and its types, beating of spouse, child abuse and its types, and infanticide, definition, types and methods of infant murder and their legal issues and information
13- Basics of forensic traumatology, types of injuries and its compliance with Islamic punishment
14- Basics of identification in living people and corpses, establishing a parent-child relationship with a child
15- Ethical and legal issues in HVF and artificial insemination, embryo and gamete donation, rented uterus, cloning and foster adoption, organ donation
16- Sexual issues from the perspective of forensic medicine: Hymen, examination method, Hymen types, diagnosis of Hymen health and its rupture, how to issue sexual examination certificates and Hymen
17- Deviations and sexual assaults, sexual disorders, indecent acts, examination of sexual victims, how to sample from genitals, sending samples to the laboratory, interpretation of test results, types of tests related to rape, legal provisions of Islamic punishment in relation to Sexual issues
18- Sexual identity disorder, transsexual and hermaphroditism, permission to change or correct gender

Main course references:

1- The book of general forensic medicine and poisoning, Tehran University of Medical Sciences and Health Services Publications, faculty members of Tehran University of Medical Sciences - latest edition
2- Ethical History, Regulations of Midwifery and Legal Pregnancy, Dr. Farzad Gheshlaghi - Isfahan University of Medical Sciences and Health Services Publications - Last Edition
3- Forensic pathology, author B. Mayo, translated by Dr. Abedi et al., Forensic Medicine Research Center, latest edition
4- General legal requirements for assistants and obstetricians - Dr. Hossein Panahizadeh, Sarman Jihad Daneshgahi Publications - latest edition
5- Gamete and embryo donation in infertility treatment - a group of authors from the Center for Research and Development of Humanities - Samat Publications - latest edition

Student evaluation method in different areas:

Active presence in class - Participation in the final exam

Course Code: 24
Course Name: Forensic Medicine in Midwifery Practicum
Prerequisite or Concurrent: History, Ethics, Laws and Rights in Midwifery - Law and Forensic Medicine in Midwifery
Number of credits: 1 credit
Credit type: Internship

General purpose of the course:
Full knowledge of legal cases related to the midwifery profession and the ability to recognize legal cases from illegal such as abortion, virginity-related penalties etc.

Course Description: During this internship, students become familiar with the legal issues related to the midwifery profession through objective observation and performing some examinations and sampling.

Outline: (51 hours)
Observation, examination and sampling in legal cases related to the midwifery profession in forensic medicine centers.
A- Dissection room: 16-11 hours B- Gynecological and midwifery examinations 40-35 hours
During 12 days (4 hours a day and 1.2 hours with a 15-minute rest) Note: The following should include 10-15 cases. (There is no problem in doing more than what is set)

Familiarity with how to determine a living or dead fetus born to fetal age	Familiarity with examinations of deaths due to complications of pregnancy	Familiarity with maternal and fetal autopsy and familiarity with examination of bodies and victims of rape and necessary sampling
Examine women who have been abused or modestly abused	See how to prove the identity of the child and to whom it belongs	Observation and examination of girls, women and children who have suffered from aberrations, problems and sexual issues
Record one of your examinations as a midwife and reporting in accordance with legal regulations and standards	Familiarity with how to examine sexual victims, clinical signs and symptoms of rape, how to sample and send to the laboratory if necessary	Observation and examination of forensic clients who have performed a criminal abortion
Participate in a hearing on a midwife's misconduct case	Observation and examination of children who have been abused	Observation and examination of forensic clients who have become pregnant illegally (proof of pregnancy)
Familiarity with actions of a	Performing examinations of	Observation and examination of

midwife that is known as a crime and has legal penalties	forensic clients to determine and prove pregnancy	Hymen and diagnosis of healthy Hymen and its types and Hymen rupture and time elapsed from rupture and diagnosis of repaired Hymen
	Determining the type of injuries and its compliance with the Islamic Penal Code	Familiarity with the cases referred for obtaining a medical abortion license, Familiarity with maternal and fetal abortion indications, Familiarity with the legal process and procedures for issuing an abortion license

Main course references:

1. Books of ethics and midwifery regulations, as well as books of medical ethics, as well as books of legal and penal laws, as well as a description of midwifery duties (latest edition)
2. The book of general forensic medicine and poisoning - Tehran University of Medical Sciences and Health Services Publications - Faculty members of Tehran University of Medical Sciences and Health Services - Dr. Mitra Akhlaghi - Dr. Mahshid Afshar - Dr. Sholeh Barouni 0 Dr. Fakhreddin Taghdasi Nejad - Dr. - Dr. Mazaher Ghorbani - latest edition
3. Ethical History - Regulations of Midwifery and Forensic Medicine, Dr. Farzad Gheshlaghi - Isfahan University of Medical Sciences and Health Services Publications - Latest Edition
4. Forensic Pathology - Beymayu Writer - Translated by Dr. Abedi et al. - The latest edition of the Forensic Medicine Research Center
5. General Forensic Medicine for Residents and Obstetricians and Gynecologists Dr. Hossein Panahizadeh Jihad Daneshgahi Publishing Organization Latest Edition
6. Donation of gametes and embryos in the treatment of infertility - a group of authors from the Center for Research and Development of Humanities with Samat Publications - latest edition

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 25

Course Name: Embryology

Prerequisite or concurrent: Anatomy 1 and 2 - Cytology and histology

Number of credits: 2 credits

Credit type: theoretical

General purpose of the course:

1- Familiarity with how the fetus is formed and the stages of its growth and development

2- Familiarity with the factors affecting the growth and development of the fetus in the womb

3- Familiarity with disorders related to different stages of fetal development and factors affecting it

Course description: During this course, students will get familiar with the formation of the fetus and its developmental stages, as well as the factors affecting its growth and related disorders.

Outline: (34 hours)

A. General embryology

1- Defining the history and importance of embryology

2 - Genital cell formation or gametogenesis, spermatogenesis, ovogenesis, abnormal myosgametes

3- Fetal development in the first week of fertilization, zygote and abnormalities of the first week, abnormal eggs and abnormal implantation conditions

4- Embryo development in the second week, implantation of embryonic button development

5- Fetal development in the third week, gastrolysis and continuation of development until the eighth week of the embryonic period, formation of three layers of the fetus

6- Fetal development during the active period from the third to the tenth month

7- Development of placenta and umbilical cord and placental abnormalities and placental abnormalities

8- Twins and all kinds of strange twins and other multiplications

9- Factors affecting the full development of the fetus, the effects of drugs, maternal diseases, smoking, addiction, nutrition and mental disorders, etc.

B- Specific embryology:

Chapter One - General Development of Paraximal Mesoderm - Notochord - Musculoskeletal Development - Upper and Lower Limb Development

Chapter 2 - Intermediate mesoderm and urinary tract

Chapter 3 - Genital tract and related abnormalities (hermaphroditism, etc.)

Chapter 4 - Evolution of the circulatory system and related abnormalities

Chapter 5 - Development of the gastrointestinal tract and related disorders

Chapter Six - The Evolution of the Face

Chapter 7 - Ectoblast development and nervous system abnormalities

Chapter 8 - Development of the autonomic nervous system of the sympathetic and parasympathetic systems

Chapter 9 - Fetal growth rate

Observation of vasosperm under a microscope, embryo culture, observation of egg cell proliferation stages, embryonic growth in different weeks

Main course references:

1- Longman Embryology (translation), latest edition

2 - Sadler, T.W. Langmans Medical emberyology. (last edition). Philadelphia: Williams & Wilkins, (last edition).

3- Moore, Keith L. Essentials of human embryology. Burlington: Decker, (last edition).

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 26

Course Name: Genetics
Prerequisite or concurrent: None
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course:

• Full knowledge of the principles of diagnosis in genetic diseases in the fetus
• Acquiring the necessary skills in implementing methods of prevention and diagnosis of diseases (genetic diseases) in society
• Scientific and practical application of clinical and laboratory effects and signs in the field of genetics and cells in relation to the provision of clinical midwifery services
• Familiarity with chromosomal abnormalities

Course description: During this course, the principles of diagnosis of genetic diseases in the embryonic period are explained and students are introduced to chromosomal abnormalities, prevention methods and principles of pathogenesis.

Outline: (34 hours)

1- Medical genetics:
History and course of genetic evolution, definition of genetic science and current position of genetics in human life and organisms - branches of genetics, medical genetics, genetic factors and general structure and their general relationship with each other (chromosome, chromatin, chromatid, gene) p cell structure and E-cell life cycle, mitotic and meiotic division, gametogenesis in male and female.
Types of inheritance of traits and diseases in humans:
A. Single gene
Autosomal pattern (gene penetration and diverse gene expression)
Autosomal recessive
Depending to the sex of the dominant
Dependent to the sex of the recessive
(Genealogy drawing and problem solving)
B- Chromosomal
number (euploidy and anaploidy and description of anomalies)
Structural (deletion-enhancement-displacement-inversion and description of abnormalities and isochromosomes)
Preparation of karyotype
C- Multifactorial inheritance of multiple genes- Normal traits (height and weight) -Regular diseases and abnormalities and its problems -Study of twins and heritability and variance.
D- Cytoplasmic (mitochondrial) study of heteroplasmic-hemoplasmic-mutations and deletions of mitochondrial genome and related genealogies

2- Molecular genetics:

Molecular structure of a gene - How to prove that DNA is a molecular agent of inheritance - Principles and basics of DNA and RNA structure - How to duplicate DNA, how to convert genetic information from DNA into a final product (protein) - How to copy DNA and MRNA structure Principles of protein synthesis

Mutations and its types - Mutation results - Mutation factors - Mutation mechanism - Mutations and diseases in humans - HB molecule structure, Sickle cell anemia - Types of hemoglobin disorders - Principles of DNA amplification - Mendelian principles of genetics - How to create plasmid Intracellular Transplantation - Applications of Genetic Engineering Practice.

3- Immunogenetic:

Principles and classification of antibody structure - Mechanism of diversity in antibodies - HLA antigens (tissue transplantation and HLA - Diseases and HLA) - Main and subgroups of blood and RH - Issues related to blood and RH incompatibilities in the fetus and mother.

4- Prenatal diagnosis:

Importance and types of physical methods - biological - sonography - Xray fetoscopy, chorionic biopsy - amniotic fluid - principles of study of chromosomal and metabolic diseases, how to do it and indications - the most important diseases that can be diagnosed before birth.

5- Genetics and cancer:

The role of heredity in cancer, the relationship between chromosomes and cancer - The role of viruses and cancer - Oncogene genes - Carcinogenic cases - Mechanism of action of carcinogenic substances - The relationship of carcinogenic factors with oncogenic genes - Other issues, especially new issues in genetics.

6- Teratogens:

Definition of types of teratogens - Classification of teratogens - Description of a sample of different chemical, viral, microbial-pharmacological, physical, mechanism of action of teratogens - Tissue and organ sensitivity of teratogens - Social and medical importance, relationship of teratogens to mutagen and carcinogens.

7- Genetic counseling:

Definition, history, how it is done, scientific principles of limitations, cases of application and non-application - scientific and emotional issues.

8- Visiting genetic counseling centers

Main course references:

Genetics in Thompson Medicine. Thompson, James Scott. The latest edition.

2. Williams pregnancy and childbirth. Cunningham, F. gus. The latest edition

3 - Medical Genetics principles and praetice: Nora / (last edition) Fraser

4- ABC of Clinical Genetics th. (last edition). Helen M Kingston.

5- And other valid up-to-date sources

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 27

Course Name: Pregnancy and Delivery1-Normal pregnancy
Prerequisite or concurrent: Basic science courses (Table B)
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course:

1- Full knowledge of pregnancy physiology, pregnancy diagnosis, importance of health and nutrition during pregnancy, principles of prenatal care, common complaints caused by pregnancy and ways to prevent them, diagnosis of normal and abnormal cases during pregnancy and familiarity with necessary measures and care in each

2- Health education for mothers and families in the field of physical, mental, social and emotional issues

Course description: During this course, students will get familiar with pregnancy and its physiology, ways of diagnosis and principles of necessary care during this period, and common complaints caused by pregnancy in ways of preventing it.

Outline: (34 hours)

1- Introduction to midwifery science, maternal and child health and fertility, the purpose of midwifery science - the position of midwives, their duties and competencies and skills, the position of midwives in the care delivery system - health indicators (such as mortality rates ...) and the impact of midwifery services on them

2- A review of the description of the reproductive system and mentioning the types of pelvic in terms of delivery science

3- A review of the physiology of the reproductive system and the cycle of a normal menstrual cycle leading to pregnancy - fertilization and pregnancy

4- Pre-pregnancy counseling and care in order to prepare for pregnancy

5- Pregnancy care, goals, terms, first and second examinations, taking history and examinations - common tests in pregnancy, normal values of tests and necessary measures based on each of the results - repetition of pregnancy tests and tests of special and important cases

6- Dangerous signs and abnormal symptoms that endanger the pregnancy, examinations and examination of the fetus during pregnancy

7- Leopold examinations (appointment, show, position, engagement, state) - types of pelvis and their differences

8- Symptoms (probable and definite hypothesis) and diagnosis (urine, blood and ultrasound tests) of pregnancy - Uses of ultrasound in pregnancy

9- Weight gain in pregnancy - Nutrition of the pregnant mother (calories and important nutrients, etc.)

10 - Public health and common complaints and disorders during pregnancy (nausea and vomiting and urinary disorders, skin and hair, mouth and teeth, etc.)

11- Physiological changes: material metabolism, hematological changes, immunity, coagulation, cardiovascular, pulmonary, urinary, gastrointestinal, endocrine, genital, skeletal and eye
12 Changes in decidua, amniotic fluid, umbilical cord and placenta - placenta and placental hormones - transfer of material from placenta to fetus
13- Training and preparation classes for pregnancy and childbirth (nutrition, physical exercises, sexual behaviors, breathing exercises and relaxation for childbirth and ...
14- Islam's opinion about health during fertilization and pregnancy and ...

Main course references:

1- Williams pregnancy and childbirth. Cunningham, F.. گاس. The latest edition
2- Mills Midwifery Textbook. Mills, Margaret F. The latest edition
Varneys Midwifery - (last edition), New York: Jones & Barlett 3 -
And other Essential of maternity Bobak health care or nursing books - 4
2-5 volumes of integrated maternal health care (hospital services guide inside and outside the hospital) - Ministry of Health, Family and Population Health Office, Maternal Health Office
6- National guide to performing natural childbirth and providing non-pharmacological methods to reduce labor pain, Ministry of Health, Family and Population Health Office, Maternal Health Department
7- National guide to providing midwifery and maternity services, mother-friendly hospitals - Ministry of Health, Family and Population Health Office, Maternal Health Department
8- Spiroff, glass case. Female Hormoneology and Infertility latest edition

Student evaluation method in different areas:

1- Active presence in the class
2- completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course Code: 28

Course Name: Normal Pregnancy Practicum
Prerequisite or concurrent: Pregnancy and Delivery (1)
Number of credits: 1 credit
Credit type: Internship

General purpose of the course:

1- Familiarity with prenatal care units (health centers)
2- Diagnosing and managing a normal pregnancy and gaining skills in performing prenatal care
3- Familiarity with education and counseling of pregnant mothers in relation to pregnancy (pregnancy health, common complaints during pregnancy and ways to prevent them, etc.)
4- Establishing proper communication with mother and family
5- Detection of abnormal cases with the supervision of the instructor and performing relevant care and actions (referral, etc.)
6- Observance of human, moral, Islamic and professional standards towards pregnant mothers, companions and employees

Course description: During the internship of this credit, students, while getting familiar with the units providing health services, perform prenatal care along with the necessary points under the supervision of instructors.

Outline: (51 hours):

Admission of the client - General and abdominal examinations
- Performing vaginal examinations to diagnose the onset of labor and the stages of labor progression
-Requesting the necessary tests during pregnancy, prescribing, diagnosing abnormalities and following them up
- Carrying out the necessary training for mothers and fathers regarding pregnancy health (nutrition, exercise, etc.) and preparation for playing the role of parents
- Exercise training during pregnancy to prepare for childbirth
The above cases will performed in midwifery clinics (prenatal and examination room) under the supervision of a midwifery instructor.

During 12 days (4 hours a day and 1.2 hours with a 15-minute rest) (there is no problem in doing more than what is set by the student)

Interpretation and correct guidance based on the results of ultrasound or fetal evaluation tests:3 cases	Prescribing authorized and necessary drugs during pregnancy for 10 pregnant women	-Taking history and physical examination from 25 normal pregnant women (5 observations and 15 performed) with providing necessary education) -Brief acquaintance with 5 high risk pregnancies

		within 12 days
Examination of at least 10 lower extremities for edema and its extent and varicose veins	Request 1-2 times U / A, U / C during pregnancy	Taking a history and psycho-social and physical evaluation from 5 cases of abnormal pregnant women including various internal diseases and surgery associated with pregnancy such as heart, diabetes, renal urinary tract infection, anemia, perinatal anemia, perinatal ectopic pregnancy, menopause, ectopic pregnancy and 10 times Leopold maneuver e.
Teaching and explaining a case of fetal movement testing	Request 1-2 cases of Ultrasound	
Providing different trainings during pregnancy in 2 different subjects (in class or individually)	to see NST, 1-2 times	Perform 15 complete physical examinations of different organs of the b (heart, lungs, thyroid, anemia, kidn breasts, lower limbs)
Interpretation and correct guidance based on clients' test results in 10 cases	Perform 1-2 rounds of Roll over test	File and request routine or necessary tests during pregnancy for 10 pregnant women
Participate in group discussions and study the theoretical topics		

Main course references:

1- Williams pregnancy and childbirth. The latest edition
2- Mills Midwifery Textbook. Mills, Margaret F. The latest edition
3- Varneys Midwifery - (last edition), New York: Jones & Barlett, 4- Other Essential of Maternity Books
5- Other reliable up-to-date sources such as Spirov's female hormoneology
6- Two volumes of integrated maternal health care (hospital services guide inside and outside the hospital) - Ministry of Health, Family and Population Health Office, Maternal Health Office
7- National guidelines about maternal and child birth.
8- National guidelines about providing midwifery and obstetrics services

Student evaluation method in different areas:

1- Active presence in the classes
2- 2- completing and submitting assignments
3- 3- Participation in the midterm exam
4- 4- Participation in the final exam

Course Code: 29

Course Name: Pregnancy and Delivery (2), Normal, Safe and Physiological Delivery and Methods to Reduce Labor Pain

Prerequisite or concurrent: Pregnancy and Delivery (1), Normal pregnancy practicum

Number of credits: 2 credits

Credit type: Theoretical

General purpose of the course:

1) Acquiring sufficient knowledge about the physiological process of childbirth, how to manage and control and care for mother, fetus and baby during different stages of natural childbirth and the postpartum period.

2) Familiarity with pharmacological and non-pharmacological methods to reduce labor pain

3) Achieving correct insight and correct diagnosis and appropriate decision-making in performing the necessary care and providing the necessary education to the mother according to scientific, cultural, social, moral, religious and legal principles.

Course description: This course explains the methods of reducing non-pharmacological pain and in this way, students are introduced to various methods of reducing labor pain.

Outline: (34 hours)

- Mechanism of delivery, delivery management and normal and physiological delivery: admission: taking history - general examinations of abdomen and pelvis - uterine contractions and general condition of the mother physically and mentally, and reviewing the history

First stage of labor: definition, management and necessary care of the mother (position, nutrition, urination, defecation, venous fluids, rest, mental attention, vital signs, request for necessary tests, perineal lavage, general maternal health, breathing exercises), Active administration of labor (amniotomy, acceleration of labor with oxytocin), prescribing drugs for the development of dilatation (benefits and complications), recording the progress of labor (Partograph of labor) , determining and prognosis of labor, examining the condition of the mother, serum administration, positioning and movement, use of pain relief measures, evaluation of fetal status and prevention of possible complications.

Fetal evaluation during delivery: fetal care, types of electronic fetal monitoring, FHR pattern, and changes (cardiac arrhythmias, including types of fetal heart rate drop (premature, late and variable and its causes) and other disorders, treatment of abnormal pattern of heart rate, monitoring complications, fetal distress (diagnosis, treatment and control)

Second stage of labor: definition and diagnosis, administration and performance of necessary care (mother's positioning, pushing education, preparation of the maternity environment, pay attention to the mother mentally and physically), shoulder and trunk protrusion, different positions holding the baby during delivery, baby-mother contact, immediate maternal care immediately after birth).

Episiotomy (definition, types, timing, repair and necessary education for the mother)

Infant: Immediate care and evaluation (Apgar score, umbilical cord clamp, prevention of heat loss in infant, neonatal CPR, neonatal examination and examination of reflexes),umbilical cord infection, temperature, immunization, vitamin K administration, identification, trauma and bleeding, continuity

of care, discharge and parent education, rooming in), routine screening tests, circumcision, the effects of the drug on on fetus, trauma and bleeding, discharge and education of parents and continuation of care.

Third stage of labor: Definition, diagnosis of placental abruption, management and necessary care (vital signs, placental abruption techniques, use of oxytocic substances (types, effects, complications), attention to the amount of bleeding, umbilical cord blood sampling), Courage and removal of the placenta by hand, intrauterine examination

Fourth stage of labor: Definition, placenta examination, administration and necessary care (vital signs, bleeding, height and consistency of the uterus, perineal examination, control of absorption and excretion).

Methods of managing labor pain:

The theory of pain and the mechanism of creating and feeling pain

- Pregnancy preparations
- Breathing techniques and relaxation
- Read Method - Dick
- Bradley Method
- Lamaze Method

Methods of controlling labor during labor

1- Methods of reducing pain
- Change position and correct the situation
- Opposite pressure
- Remove pressure from the abdomen

2- Surface receptor activation techniques
- Surface heat and cold
- Hydrotherapy and water delivery
- Touch and massage
- Acupuncture and acupressure
- TENS Electrical stimulation of the nerve through the skin
-Intracutaneous injection of distilled water
- Aromatherapy

3- The technique of increasing the inhibition of pain-reducing lower pathways
- Attention focusing and distraction
- Music
-Biofeedback
-Hypnosis

4- Pain control methods (inhaled and injected)

Postpartum care: Postpartum pain, Lucia excretion, Perineal hygiene, Get out of bed, Urinary excretion, Intestinal function, Nutrition, Vital signs, Breast care, Breastfeeding, Intercourse, First menstruation, Mental health, Exercise, time of discharge, Counseling and education of the spouse about the role of the father and assistance to the wife in the care of the baby, Education of postpartum care after discharge, including the following:

Postpartum education: Maternal personal hygiene, Wound care, Bathing, Nutrition, Intimacy, Family planning, Danger symptoms (bleeding and hemorrhage, Chills and fever, suprapubic pain and

infectious discharge), Vaccination, Neonatal screening tests, Breastfeeding, Infant colic, Jaundice, Urination and defecation of neonate, Growth monitoring ...

Care from 6 hours to 2 months after delivery: time and number of visits and related standard services and help the mother and parents to take care of the baby

Home birth: how to support the health care system, home visits, selecting a qualified pregnant mother, preparing the mother and family, anticipating the necessary facilities and how to transfer the mother to the hospital, mother education, advantages and disadvantages, ethical and legal considerations.

Birth Centers:

Familiarity with birth centers and how midwives work in those centers

Main course references:

1- Williams pregnancy and childbirth, The latest edition

2- Mills Midwifery Textbook. Mills, Margaret F. A.H.

Student evaluation method in different areas:

1- Active presence in the class

2- completing and submitting assignments

3- Participation in the midterm exam

4- Participation in the final exam

Course Code: 30

Course Name: Normal Delivery Practicum
Prerequisite or concurrent: Pregnancy and Delivery 2
Number of credits: 2 credits
Credit type: Internship

General purpose of the course:

Gaining ability to management and performance of natural childbirth
Gaining ability to distinguish between normal and abnormal deliveries
Gaining ability to caring for mother and baby
Gaining ability to manage the postpartum stage and control childbirth

Course description: During the internship of this credit, students are provided with the chance of managing and guiding the pregnancy and childbirth and making this experience enjoyable.

Outline: (144 hours)

- Controlling and performing the necessary examinations in admission of mother and diagnosing the need for hospitalization, performing the necessary medications and fluid therapy, requesting the necessary tests
- Performing labor education (mental relaxation, muscle, breathing exercises, etc.) requesting the necessary tests, performing maternal care in labor, evaluating the fetus during childbirth, examining the FHR pattern and diagnosing abnormalities, taking appropriate action in the different situations, recording information in partograph)
- Performing normal deliveries, examination and care of the newborn
- Managing the postpartum stages, performing maternal examination and discharge after delivery
- Education, counseling with the mother in cases of family planning, breastfeeding, etc. (counseling with the spouse and family, if necessary)

13 days during morning and evening for 10 hours (every day 1 hour for prayer and lunch) = 2 points
Note: (there is no problem in doing more activities by students)

Umbilical cord clamp and physical examination of the baby, Vitamin K injection and monitoring of the bracelet and monitoring of the baby's foot print in 4-10 cases	Wearing gloves and scrub and using the equipment correctly and opening the pack correctly and providing the necessary equipment by applying the correct principles of sterilization for 4-10 cases	Attendance at pregnancy and childbirth preparation classes - taking a history, physical examination and doing Leopold maneuvers, and getting vital signs in 20 cases
Assistance in repairing episiotomy or rupture in one case with necessary attention and care before, during and after repair	Properly perform prepping and draping for 4-10 perineal	FHR control in at least 100 cases including finding the correct location, checking the fetal pulse with the mother's pulse, complete one-minute control, necessary

		control immediately after contractions and counting and getting familiar with the monitoring devices
Proper placenta delivery and complete examination of 4-10 cases	Performing correct episiotomy anesthesia in one case	Vaginal examination: dilatation effacement, station, fetal position, cervical position, amniotic sac position and to some extent pelvic examination (12-20 times)
Proper disposal of contaminated consumables and proper collection of non- consumables in the relevant places after delivery 4-10 cases	Diagnosing the need for episiotomy and observing 5 cases of anesthesia and 5 cases of episiotomy	Necessary examination and deciding to hospitalize mother in labor in 3 cases Use of non-pharmacological methods to reduce labor pain
Establishing bonding and attachment between the newborn and mother after delivery in 4-10 cases	Observe 5 cases of deliveries	Preparing the mother for labor room (clothing, bed, recommending to empty the bladder, taking a vein and serum, if necessary, blood sampling and necessary explanations) in 10 cases
Provide comfort for patient and control the fourth stage (including hemorrhage control, checking uterine height and consistency, vital signs, patient's orientation every quarter to one hour) after delivery and correct registration and reporting it to the instructor / midwife in 10-4cases	Assistance 4 deliveries	Complete management and control of labor (including control of heart sound, control of uterine contractions, nutrition, position, trustworthy relationship, necessary education and emotional support during childbirth, vaginal examination, attention to bladder emptying, helping to relieve pain using various methods, prescribing medication and fluid) in necessary cases, answering the questions of the mother ....) in 24 cases for at least 3 hours, 1-2 of them are receiving induction
Provide complete postpartum education to the mother before delivery (including self-care	Complete delivery in 4-10 cases	Perform amniotomy by observing all the necessary conditions in 1 case

and personal hygiene, bathing, wound care, lucia, nutrition, hygiene in defecation and urination, dangerous signs in the mother and the need for immediate referral, breastfeeding, vaccination, neonatal vaccination), Other neonatal care, neonatal danger signs, tests for screening for diseases leading to neonatal retardation, sexual intimacy and family reunification, as well as the possibility of re-pregnancy and the time and place of subsequent visits) in 4-10 cases.	Monitoring the condition of the infant immediately after delivery (opening the airway, preventing hypothermia, stimulating breathing to improve Apgar score 1 and 5 minutes after birth in 4-8 cases)	Diagnosis of delivery time and timely transfer the mother to delivery room in 4-10 cases
	Discharge of the mother and performing the necessary examinations and educate mother during discharge about caring herself and her child in 2 cases	
Participate in group discussion and study the theoretical topics		

Main course references:

1- Williams pregnancy and childbirth. The latest edition.

2- Mills Midwifery Textbook. Mills, Margaret F. The latest edition

3 - Danforths obstetrics and gynecology edited by James R. Scoot. (the last edition). Philadelphia: Lww

4 – Current obstetric gynecology diagnosis and Treatment, edited by Alan H. Decherney. – (the last edition). New York: McGraw Hill.

5 – Maternity and women's health Care / – edited by Ditra Leonard Lowder Milk and etal. – (the last edition). - st. Louis: Mosby

6 - A Guide to effective care child birth. 3rd ed. - oxford: oxford university,

7 - Varneys Midwifery - (the last edition), New York: Jones & Barlett

8- Denise Tiran and Sue Mack -Complementary Therapies for pregnancy and child birth

9-Essential of maternity Bobak

And other books on health care or maternal and child care

10- National guidelines about performing natural childbirth and providing non-pharmacological methods to reduce labor pain.

12- National guidelines about providing midwifery and maternity services, mother-friendly hospitals.

13- Books related to physiology pain as well as various pharmaceutical and non-pharmacological methods to reduce labor pain

14- Women's health from another perspective, Roosta, Firouzeh, Minokdeh, Shiva. The latest edition

Student evaluation method in different areas:

1- Active presence in the class

2- completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exam

Course Code: 31

Course Name: Pregnancy and Delivery (3)- Abnormal Pregnancy and Delivery
Prerequisite or concurrent: Pregnancy and Delivery (1) - Pregnancy and Delivery (2)
Number of credits: 2 credits
Credit type: theoretical

General Purpose of the course: To acquire sufficient knowledge about the diagnosis, management and care of mother and fetus in abnormal pregnancies and deliveries

Course description:

During the course, the diagnosis, management and care of mother and fetus in abnormal pregnancies and deliveries are taught.

Outline: (34 hours)

Note: Whenever more time is needed, with the approval of the midwifery department, between 50 and 100% can be added to the teaching hours.

Types of dystocia during labor, including output forces, birth canal, fetus, etc. - Abnormal fetal lie and presentations and positions - Changing positions in the mother -
Forceps, vacuum, cesarean section and subsequent care - augmentation and induction and other drugs used in labor and how to do them and their side effects
Fetal monitoring during pregnancy and fetal health assessment tests in cases of abnormal pregnancy
Perineal and uterine ruptures - Uterine reversal - Manual placental abruption - Postpartum hemorrhages - Postpartum infections - DIC- Abortion - Ectopic pregnancy - Trophoblastic diseases of pregnancy (hydatidiform mole) - GTT - invasive mole
Placenta previa - Premature placental abruption - Traumas in pregnancy and its care - Diseases and abnormalities of the placenta (placenta accreta, etc.) and fetal membranes (polyhydramnios - oligohydramnios - umbilical cord prolapse - infection and inflammation of the fetal membranes)
Premature delivery - Premature rupture of fetal membranes - Prolonged pregnancy
Intrauterine growth retardation - RH and ABO incompatibility
Severe pregnancy vomiting - hypertension in pregnancy (preeclampsia - eclampsia, chronic hypertension, etc.)
Multiple pregnancies - Pregnancy in young and old women - Addiction in pregnancy - Other important and new cases that are not included in the course of pregnancy and childbirth, according to the professor

Main course references:

1. Pregnancy and Childbirth Williams, The latest edition.
2. Mills Midwifery Textbook, Mills, Margaret F. The latest edition
3 - Danforths obstetrics and gynecology edited by James R. Scoot. (The latest edition). Philadelphia: Lww
4 – Current obstetric% gynecology diognosis & Treatment, edited by Alan H. Decherney. – (The latest edition) - New York: McGraw Hill.

5 – Maternity & womens health Care / – edited by Ditra Leonard Lowder Milk and et al. – (The latest edition). - st. Louis: Mosby
6 - A Guide to Effective care child birth. (last edition). - oxford: oxford university,
7 -Varneys Midwifery –3 rd ed, New York: Jones & Barlett
8- Essential of maternity Bobak
9 - Carlson, Karen J., Stephanie A., Eisentot - Primary care of woman - st. Louise - Mosby.
10- Maternity Nursing / Naternal and child Nursing
11 – Danforths obstetrics and gynecology edited by James R. Scoot. (The latest edition). Philadelphia: Lww.
12 - Novaks gynecology, edited by Jonathan s. Berek. - (The latest edition). Philadelphia: Lww.
13 – High risk Pregnancy Management options, edited by David k. James. – (The latest edition). London: W.B. Saunders.
14 - Labor prepartion, simlin, 2009 - (The latest edition)
16- National guidelines to performing natural childbirth and providing non-pharmacological methods to reduce labor pain.
17- National guide to providing midwifery and obstetrics services, mother-friendly hospitals.
18- Women's health from another perspective, village, turquoise, Minokdeh, Shiva.
19-Complementary Therapies for pregnancy and child birth - Denise Tiran and Sue Mack
Student evaluation method in different areas:

1- Active presence in the class
2- 2- completing and submitting assignments
3- 3- Participation in the midterm exam
4- 4- Participation in the final exam

Course Code: 32

Course Name: Normal and Abnormal Delivery Practicum
Prerequisite or concurrent: Pregnancy and Delivery (3)
Number of credits: 2 credits
Credit type: Internship

General purpose of the course:

- Acquiring skills in performing normal and abnormal deliveries
- Diagnosis and care of abnormal pregnancies, familiarity with breech, twin, premature and late delivery
- Familiarity with devices such as fetal monitor, forceps, vacuum and its application and cesarean delivery
- Familiarity with courage and curettage

Course description: During this internship, students take care of patients and perform normal deliveries in order to gain skills in performing normal deliveries and diagnosing and caring for abnormal pregnancies and getting familiar with performing abnormal deliveries.

Outline: (144 hours):

- Controlling and performing the necessary examinations in accepting labor and diagnosing the need for hospitalization
- Performing patient education in labor (mental relaxation, muscle relaxation, breathing exercises, etc.) requesting the necessary tests, performing maternal care in labor, evaluating the fetus during childbirth, examining the FHR pattern and diagnosing abnormalities, taking appropriate actions in various situations, record information in Partograph)
- Performing normal deliveries, examination and care of the newborn
- Managing the postpartum stages, performing maternal examination and discharge after delivery
- Education, counseling with the mother (spouse and family) in cases of family planning, breastfeeding and ...
- Delivery with episiotomy and repair of tears
- Management of abnormal deliveries such as breech, twin, premature and late delivery, preeclampsia, membrane infection and ...
- Performing labor stimulation and prescribing medication in different cases
- Serum infusion
- Delivery in mothers with heart, respiratory, renal and urinary, blood, infectious, gastrointestinal diseases and ....
-Ability to manage and control clients who have instrumental delivery.
- Acquiring skills in prescription
-Courage and manual removal of the placenta and intrauterine examination in stage 4, observation of abortion, curettage and cesarean section and assistance with relevant care

13 days in the morning and 10 hours in the evening (every day one hour is devoted to prayer and lunch) = 2 credits (for normal and abnormal deliveries)

<table>
<tr><td colspan="3">Note: Half to two thirds of the following should be used in cases such as diabetes, preeclampsia, premature rupture of the amniotic membranes, post-date / post term and previa, cardiac disease, twin, breech, fetal death, IUGR, preterm delivery, vacuum, etc. The name of each case should be recorded in the summary that the student writes for each individual so that it can be determined later whether each student has been trained in all cases and how many cases he / she has done in each case. (There is no problem in doing more than the amount predicted by the student.)</td></tr>
<tr><td>Umbilical cord clamp and physical examination of the infant, injection of vitamin K and supervision of the bracelet and taking the foot print in 4-10 cases</td><td>Wearing the right gloves and scrub and using the equipment correctly and opening the pack correctly and providing the necessary equipment by applying the correct principles of sterility and protection of 4-10 cases</td><td>Taking a history, physical examination and doing Leopold maneuver, and vital signs in 20 cases</td></tr>
<tr><td>Episiotomy 2 cases with necessary attention and care before, during and after repair</td><td>Properly perform prepping and draping for 4-10 perineal</td><td rowspan="3">FHR control, at least in 100 cases (as much as necessary for labor control) including finding the right place, compering fetal pulse with maternal pulse, complete 1 minute control, necessary control immediately after contraction, counting and recording and using monitoring</td></tr>
<tr><td>Proper placenta delivery and complete examination of 4-10 cases</td><td rowspan="2">Perform correct episiotomy anesthesia in 2 cases and pudendal anesthesia in 1 case, if possible</td></tr>
<tr><td>Manual removal of the placenta and intrauterine examination in the fourth stage in 1 case</td><td>Vaginal examination: dilatation, effacement, station, position, cervical position, bladder position and pelvic examination (12-20 times)</td></tr>
<tr><td>Proper disposal of contaminated consumables and proper collection of non-consumables in the relevant places after delivery in 4-10 cases</td><td>Diagnosing the need for episiotomy and performing episiotomy 2 cases</td><td>Necessary examination and decision to hospitalize the fetus in labor 3 cases</td></tr>
<tr><td>Establishing bonding and attachment between the newborn after delivery in 4-10 cases</td><td>Observe Labor management in almost 5 cases</td><td>Preparing the mother for the labor (clothing, bed, advising to empty the bladder, taking blood vessels and serum if necessary, and taking blood and giving necessary explanations to the delivery) in 10 cases</td></tr>
<tr><td>Provide comfort for patient and control the fourth stage (including hemorrhage control, checking uterine height and consistency, vital signs, patient’s orientation every quarter to one hour) after delivery and correct registration and reporting it to the instructor / midwife in 4-10 cases.</td><td>Assistance 4 deliveries</td><td rowspan="2">Complete management and control of labor (including control of heart sound, control of uterine contractions, nutrition, position, trustworthy relationship, necessary education and emotional support during childbirth, vaginal examination, attention to bladder emptying, helping to relieve pain using various methods, prescribing medication and fluid) in necessary cases, answering the</td></tr>
<tr><td>Provide complete postpartum education before transferring the mother to the</td><td>Complete delivery of 4-10 cases</td></tr>
</table>

postpartum ward (including self-care and personal hygiene, bathing, wound care, lucia rubra, nutrition, hygiene in defecation, danger signs in the mother need Immediate referral, breastfeeding, fecal and urinary incontinence, vaccination, other neonatal care, neonatal symptoms, tests for screening for diseases leading to retardation, sexual intimacy and family planning, and return of menstruation and the possibility of re-pregnancy and the time and place of subsequent visits in 4-10 cases and consultation with a couple 1 case		questions of the mother ....) in 24 cases for at least 3 hours, 1-2 of them are receiving induction Complete management and control of labor (including control of heart sound, control of uterine contractions, nutrition, position, reliable communication and necessary training and emotional support of childbirth, vaginal examination, attention to bladder emptying, helping to relieve pain using various non-pharmacological methods, Necessary fluid therapy in the required cases, answering the questions of childbirth or companion, etc.) 24 cases of each case for at least 3 hours, of which at least 2-3 cases are induction and half of them are cases
Observing abortion, curettage and cesarean section and helping the mother and baby after care		
Discharge of the mother and performing the necessary examinations and educate mother during discharge about caring herself and her child in 2 cases	Monitoring the condition of the infant immediately after delivery (opening the airway, preventing hypothermia, stimulating breathing to improve Apgar score 1 and 5 minutes after birth in 4-8 cases)	Diagnosis of delivery time and timely transfer the mother to delivery room in 4-10 cases
Participate in group discussion and study the theoretical topics		

Main course references:

1. Pregnancy and Childbirth Williams, Cunningham, F. Gus. The latest edition
2. Mills Midwifery Textbook, Mills, Margaret F. The latest edition
3 – Danforths obstetrics and gynecology edited by James R. Scoot. (The last edition). Philadelphia: Lww
4 – Current obstetrics and gynecology diagnosis and Treatment, edited by Alan H. Decherney. – (The last edition). New York: McGraw Hill.
5 – Maternity and womens health Care, edited by Ditra Leonard Lowder Milk et al. – (The last edition). - st. Louis: Mosby
6 - A Guide to Effective care child birth. (The last edition). - oxford: oxford university,
7 - Varneys Midwifery - (The last edition), New York: Jones & Barlett
8- Essential of maternity Bobak
9 - Carlson, Karen J., Stephanie A., Eisentot - Primary care of woman - st. Louise - Mosby.
10- Maternity Nursing / Naternal and child Nursing

11 – Danforths obstetrics and gynecology edited by James R. Scoot. (The last edition). Philadelphia: Lww,
12 - Novaks gynecology, edited by Jonathan s. Berek. - (The last edition). Philadelphia: Lww.
13 – High risk Pregnancy Management options, edited by David k. James. – (The last edition). London: W.B. Saunders.
14 - Complication in Pregnancy
15 - Complementary Therapies for pregnancy and child birth - Denise Tiran and Sue Mack
16- National guide to performing natural childbirth and providing non-pharmacological methods to reduce labor pain.
17- National guide to providing midwifery and obstetrics services, mother-friendly hospitals.
18- Also internal diseases and surgery in pregnancy and childbirth, latest edition
19- And books related to pain physiology and also books related to various pharmacological and non-pharmacological methods of reducing labor pain
20- Women's health from another perspective, Roosta, Firoozeh, Minokdeh, Shiva.

Student evaluation method in different areas:
21- Active presence in the class
2- completing and submitting assignments
3- Participation in the midterm exam
4-Participation in the final exams

Course Code: 33

Course Name: Pregnancy and Delivery 4- Medical and Surgical Diseases in Pregnancy and Delivery

Prerequisite or concurrent: Pregnancy and Delivery (1), (2) and (3) - Physiopathology and medical diseases (1), (2) and (3) - Physiopathology and surgical diseases - Medical & surgical diseases Practicum

Number of credits: 1 credit

Credit type: Theoretical

General purpose of the course:

1. Recognition of basic needs and diagnosis of human conditions during health and illness, especially pregnant women with internal diseases and surgery and its effects on pregnancy and childbirth and vice versa. Identify the problems and needs of the mother and make the appropriate decision in selecting priorities for the implementation of relevant care.
2. Application of scientific findings in providing services to sick and vulnerable pregnant women and providing the necessary medical assistance when necessary.
3. Recognizing professional responsibilities and limitations, adhering to the observance of Islamic principles and norms when providing services in order to protect the lives of mothers and children and ensure their health.

Course description:

During this course, while reviewing the changes in the physiological state of the mother during pregnancy, the diseases of pregnant women with respiratory, cardiovascular, pulmonary, renal and urinary, gastrointestinal, hepatic, blood, endocrine, neurological and psychiatric problems are also taught.

Outline: (17 hours)

Note: In case of lack of hours, with the approval of the midwifery department, between 50 and 100% can be added to the lessons.

Assessment of mother's condition (2 hours)

Physiological changes and changes in laboratory values - Prescription of drugs during pregnancy - Effects of surgery and anesthesia on pregnancy outcomes - Imaging methods - Ultrasound

Trauma (impenetrable-penetrating-treatment)

Heart disease in pregnancy (2 hours)

General measures - Pre-pregnancy counseling - Heart transplant – Vulvar diseases - Pulmonary artery hypertension - Effects on pregnancy - Cardiomyopathy around the maternity ward - Idiopathic cardiomyopathy

Infectious endocarditis - Thromboembolic diseases (superficial-deep vein thrombosis treatment) before and after delivery - Pulmonary embolism

Lung diseases (2 hours)

Shortness of breath in pregnancy - pneumonia, causes - diagnosis - treatment and prevention

Pathophysiology of asthma - Effects of pregnancy on asthma - Effects of asthma on pregnancy and fetus - Carbon monoxide poisoning - Acute respiratory failure - Clinical and therapeutic course

Kidney and urinary tract diseases (2 hours)

Urinary tract changes in pregnancy

Evaluation of kidney diseases during pregnancy - Pregnancy after nephrectomy - Urinary tract infections - Asymptomatic bacteremia - Acute and chronic pyelonephritis and urethritis - Kidney stones in pregnancy - Diagnosis - Treatment -

Glomerulopathies (glomerulonephritis - acute, chronic - rapidly progressing - nephrotic syndrome

Polycystic kidney disease and pregnancy

Chronic kidney disease in pregnancy

Getting pregnant after a kidney transplant

Dialysis during pregnancy

Acute renal failure (obstructive-idiopathic postpartum)

Gastrointestinal diseases (2 hours)

Diagnostic methods

Upper gastrointestinal disorders

Severe pregnancy vomiting

Reflux esophagitis, hiatal hernia, diaphragmatic hernia, achalasia, peptic ulcer, upper gastrointestinal bleeding

Small bowel and colon disorders - inflammatory bowel disease and pregnancy ostomy and pregnancy Ileus

Appendicitis - Acute colitis

Liver disease (1 hour)

Severe pregnancy vomiting - Intrahepatic cholestasis in pregnancy - Acute fatty liver in pregnancy - Coagulation disorders - Effects on pregnancy.

Liver in preeclampsia and eclampsia

Hepatic hematoma and its rupture

Viral hepatitis

Chronic active hepatitis - cirrhosis and pregnancy

Esophageal varices in pregnancy

Liver transplantation

Blood diseases (2 hours)

Anemia (etiology of the effects of anemia on pregnancy) - Iron deficiency anemia - Anemia due to acute bleeding - Anemia with chronic diseases - Kidney disease - Thalassemia - Megaloblastic anemia - Folic acid deficiency - Vitamin B12 deficiency - Hemolytic anemia Acquired - Pregnancy hemolytic anemia - Polycythemia - Thrombocytopenic purpura - Shock bleeding and anemia

Bacteremia and septic shock, hemodynamic changes in septic shock, diagnosis and treatment. Infectious shock and its diagnosis and treatment

Endocrine diseases (2 hours)

Diabetes, thyroid diseases and other important cases

Neurological diseases (2 hours)

Pathophysiology of invasive disorders - Epilepsy in pregnancy - Migraine headaches - Multiple sclerosis - Hannington disease - Carpal tunnel syndrome - Postpartum depression

The main references of the course: Same as the sources of theoretical courses of pregnancy and childbirth 1 to 3

Internal diseases and surgery in pregnancy and childbirth, latest edition

Complication in Pregnancy

Student evaluation method in different areas:

1- Active presence in the class
2- Completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course Code: 34

Course Name: Neonatology
Prerequisite or concurrent: Embryology
Number of credits: 2 credits
Credit type: Theoretical

The general purpose of the course:

1- Recognizing the condition of the neonates and toddler during health and illness and identifying the needs and deciding on taking necessary and appropriate measures, especially for vulnerable infants such as premature infants, etc.
2- Familiarity with abnormalities and diseases of infants and toddlers and the ability to perform the necessary examinations with neonates and toddlers
3- Recognizing how growth, development and the role of breastfeeding on the health of the child and helping to prevent diseases and infant mortality and gaining skills in teaching the above to mothers
4- Observing the principles of hygiene and prevention of diseases, including vaccination, in order to give the necessary education to the mother and family for the health of the neonates.

Course description: In this course, the teaches various topics about recognizing the condition of neonates and toddlers during health and illness, identifying their needs in cases of taking necessary and appropriate measures.

Outline: (34 hours)

- Growth and development in different periods of life (cognitive, psychological and physical development)
- How to prepare a history of neonates and toddlers and perform clinical examinations - Observe health tips in the ward and during the examination
- Normal and premature neonates - Diagnosis and determination of age and related care for premature neonates and kangaroo care - The importance of emotional communication between neonates and parents
- Diagnosis of high-risk neonates - Accidents in the delivery room
- Neonatal Apgar score (required equipment and drugs, action steps, etc.) - Familiarity with the devices available in the department: pulse oximeter, ventilator, phototherapy, incubator ...
- Asphyxia (pathophysiology of complications and care)
- Neonatal apnea (pathophysiology, risks and methods of CPR and medication)
- Birth injuries (nerves, organs, etc.)
- Respiratory disorders including RDS, aspiration, cyanosis, airway obstruction, respiratory abnormalities, tracheal and esophageal disorders, duct stenosis
- Posterior pharynx, diaphragmatic hernia, microcephaly, tracheomalacia, etc. (symptoms, complications, care and treatment measures)
- Genitourinary disorders at birth (symptoms, complications, care)
- Neonatal infections (physiopathology, clinical course, causes of diagnosis and treatment and care)
- How to isolate and its special care
- Neonatal jaundice (physiopathology, clinical course, causes, diagnosis and treatment and care)

- Neonatal seizures (physiopathology, causes, treatment and care)
- Feeding of newborns and toddlers with emphasis on breastfeeding and rooming-in - Child-friendly hospitals
- Necessary tests for neonatal screening to diagnose congenital diseases such as hypothyroidism, phenylketonuria, etc.
- Caring for abnormal babies
- Common neonatal problems and related care
- Nutritional disorders in neonates and children - How to administer serum and fluid therapy and electrolytes in the infant and related calculations
- Prevention by vaccination program
- Neonatal AIDS

The main references of the course:

1- Nelson Pediatrics - Textbook of Mechanical Infant Ventilation under the supervision of Parisa Mohagheghi, latest edition
2- Other reliable up-to-date sources and nursing books for neonatal care
3- Kangaroo Care, Ludington Hu, S, Glant, SK, latest edition
4- Kangaroo care, Guide for caring for premature infants for parents, Ministry of Health, Family and Population Health Office, Neonatal Health Department
5- WHO and UNICEF Support and promote maternal nutrition in child-friendly hospitals, Ministry of Health, Department of Child Health
6- Nichols Francine H. child birth Education. “Practice, Research and Theory, OSA: W.B. saunders (last edition)

Student evaluation method in different areas:

1- Active presence in the class
2- Completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course Code: 35

Course Name: Neonatology Practicum

Prerequisite or concurrent: Neonatology (theoretical)

Number of credits: 1 credit

Credit type: Internship

General Purpose of the course: Familiarity with examinations and care of healthy and abnormal neonates and educating the mother

Course Description: In this course, a student can learn about the neonate and how to diagnose a normal neonate from abnormal and how to care a healthy and un-healthy newborn, and give the necessary training on how to care for and feed the neonate.

Outline: (51 hours)

Carrying out examinations, care and prescriptions for healthy and high-risk neonates in the postpartum ward and neonates of the teaching hospital

During 12 days (4 hours a day and 1.2 hours with 15 minutes of rest) to perform examinations and care in at least 10 neonates (there is no problem in do more than what is determined by the student)

<table>
<tr><td>Teaching the mother about how to give medicine to the baby 1 case</td><td rowspan="2">Healthy care of neonates in 3 cases</td><td rowspan="2">10 cases of physical examination of the infant in terms of health examination: examination of head and neck and fontanelles, face, chest, heart, abdomen, abdomen, spine, color, pelvic joint, Babinski test, genital tract, fetal age tests, reflexes and nerve tests</td></tr>
<tr><td>See 1 consultation and if possible 1 consultation</td></tr>
<tr><td>Performing neonatal discharge examination 1 case</td><td>Premature neonates’ care in 2 cases</td><td>Training on 2 cases of breastfeeding</td></tr>
<tr><td rowspan="2">Vaccination training, nutrition and care of the baby, growth of the baby, urine and feces and crying of the baby, change of old clothes, newborn danger signs, necessary tests, umbilical cord care, fever and seizures, etc. 2 cases</td><td>Working with the incubator and caring for the neonates in the incubator in 3 cases</td><td rowspan="2">Perform 1 case of rinsing the baby's stomach by inserting a catheter</td></tr>
<tr><td>Working with phototherapy device 1 case and getting familiar with other devices and devices</td></tr>
<tr><td rowspan="2">Familiarity with neonatal CPR devices and its application on case modeling and observing 1 case of neonatal CPR</td><td>High risk neonates care (RDS jaundice)</td><td>Perform a gavage case by inserting a catheter</td></tr>
<tr><td>Calculation of medication and execution of doctor's prescription in 3 cases</td><td>Perform 1 case of lavage by inserting a catheter</td></tr>
<tr><td>How to work with incubator and</td><td>Connect serum 1 case</td><td>Weight measurements in 5</td></tr>
</table>

care of the device 1 case		cases
How to work with a phototherapy device and do 1 thing	Perform anthropometric measurements 8 cases	Bathing, covering clothes and keeping the baby warm 2 cases
Participate in questions and answers and study theoretical topics		

The main references of the course:

1- Nelson Pediatrics - Textbook of Mechanical Ventilation for Infants under Parisa Mohagheghi, latest edition
2- Other reliable up-to-date sources and nursing books for neonatal care
3- Kangaroo Care, Ludington Hu, S, Glant, SK, latest edition
4- Kangaroo care, Guide for caring for premature infants for parents, Ministry of Health, Family and Population Health Office, Neonatal Health Department
5- WHO and UNICEF Support and promote maternal nutrition in child-friendly hospitals, Ministry of Health, Department of Child Health
6- Nichols Francine H. child birth Education. "Practice, Research and Theory, OSA: W.B. saunders (last edition)

Student evaluation method in different areas:

1- Active presence in the class
2- Completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course Code: 36

Course Name: Pediatrics

Prerequisite or concurrent: Neonatology

Number of credits: 2 credits

Credit type: Theoretical

General purpose of the course:

1. Recognizing the child's condition during health and illness, identifying needs and making appropriate decisions to address them, selecting priorities and implementing them
2. Familiarity with child's abnormalities and diseases, the ability to perform examinations and necessary measures in each case.
3. Teaching the mother and family about the disease and child care tips
4. observing the principles of health and prevention regarding the health of the child and educating the mother and family

Course description: In this course, the topics of recognizing illness and health in children, identifying their needs and making appropriate decisions in different cases are taught.

Outline: (34 hours)

1- A review of the child's growth and development, the child's mental health, play and education and his health in general from the perspective of developmental psychology and also from the perspective of Islam
2- Preparing a history and performing clinical examinations
3- A review of vitamin metabolism and related disorders in children
4. Disorders in the metabolism of sugars, fats, proteins and related common diseases
5- Allergies and immunity and their common disorders
6- Acute rheumatoid arthritis and connective tissue diseases
7- Infectious problems and diseases of children (bacterial, viral, fungal, parasitic, ...)
8- Common heart diseases and abnormalities
9- Common respiratory diseases and abnormalities
10- Common diseases and abnormalities of the gastrointestinal tract
11- Common blood diseases and disorders
12- Common diseases and disorders of endocrine
13- Common diseases and abnormalities of the urinary system
14- Common diseases and abnormalities related to the body skeleton (bones - joints and muscles)
15- Emergencies and necessary measures
16- Common accidents in children (respiratory obstruction, poisoning, etc.)

The main references of the course:

1- Pediatric Emergency (Gregory / Baldwin), latest edition
2- Infectious Diseases of Children (Nelson), latest edition
3- Nelson Pediatric Textbook, latest edition
4- Nelson Pediatric Psychiatry (Richard E. Berman), latest edition
5- Other valid up-to-date sources according to the professor

Student evaluation method in different areas:

1- Active presence in the class
2- Completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course Code: 37

Course Name: Pediatrics Practicum

Prerequisite or concurrent: Pediatrics (theoretical)

Number of credits: 1 credit

Credit type: Internship

General purpose of the course:

1- Familiarity with diseases and emergencies of children

2- Communicating with the sick child and his parents

3- Familiarity with the general principles of treatment and care of the sick child

Course description: During this internship, students learn about children's illnesses and emergencies, how to communicate with the sick child and his parents and those around him, along with identifying the general principles of treatment and child care.

Outline: (51 hours)

- Caring for a sick child, taking a history - Performing clinical examinations
- Familiarity with some diseases of children and the ability to distinguish health from the disease
- Familiarity with emergency procedures in children under the supervision of the relevant teacher in the clinic and pediatric ward
- Caring for the necessary care of the child

During 12 days (4 hours a day and 1.2 hours with 15 minutes of rest) = 15 different cases (there is no problem in doing more than what is set by the student)

Training parents to perform the correct EEG (in terms of time and sleep deprivation before exercise)	Examination of the child's development from the point of view of the nervous system and related examinations and tests: study of mental retardation due to coronary heart disease, etc., seizures in children and its manifestations, academic failure due to brain problems, etc.	Examination of the child (head, neck, ears and nose, heart and lungs, abdomen, liver and spleen, genitals, and organs, urinary system, etc.)
Teaching children and parents proper nutrition, exercise and play	Examination of the child for anemia	Evaluation of VIS symptom in children and its differences with adults
Education, evaluation and recommendation of correct vaccination in children in different situations and conditions	Examination of the child for growth (growth retardation, abnormal growth spurt)	Differences in laboratory criteria such as Hb, HCt, FBS, Ca, Mg, P, urinary alkaline phosphatase and cratinin ... in children and adults
Observation, examination, diagnosis of symptoms and manifestations, administration and follow-up of common	ECG training from children (ECG)	
	Participate in questions and answers and study theoretical topics	

infectious and non-infectious diseases in children, including at least 15 cases of various diseases		

The main references of the course:

1- Pediatric Emergency (Gregory / Baldwin), latest edition
2- Infectious diseases of children (Nelson), latest edition
3- Nelson Pediatric Textbook, latest edition
4- Nelson Pediatric Psychiatry (Richard E. Berman), latest edition
5- And other valid up-to-date sources according to the professor

Student evaluation method in different areas:

1- Active presence in the class
2- Completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course Code: 38

Course Name: Semiology and Physical Examinations

Prerequisite or concurrent: Anatomy 1 and 2 - Physiology 1 and 2 - Immunology - Theoretical Microbiology - Parasitology and Mycology

Number of credits: 1 credit

Credit type: Theoretical

General Purpose of the course: Full knowledge of the principles of clinical examination and taking a history and how to perform physical examinations

Course description: In this course, students are introduced to the principles of clinical examination of patients, taking a history and how to perform physical examinations.

Outline: (17 hours):

- Familiarity with the methods of diagnosing diseases as well as how to treat the patient and how to start the interview
- Patient complaints
- Description of the current disease: The order of complaints from the beginning to the time of taking the history, including the course of the relevant symptom, quality and quantity, diagnostic and treatment work that has been done so far.
- Patient records
- General medical diseases and hospitalization records
- Past drug use, drug allergies (and other allergies)
- Surgery, accidents
- Personal and social records
- Family history
- Review of systems
- Preparing the patient for the examination and the necessary equipment and how to perform physical examinations
- Description of the general condition of the patient (level of consciousness, the patient's condition at the time of examination, cooperation, height, weight and nutrition, etc.
-Vital Signs
- Examination
- Skin and appendages
- Head, neck, ears, throat and nose
-Eye
- Chest and breasts
- Retina
-Cardiovascular
- Abdomen
- Urinary and genital organs
- Organs and spine
- Endocrine glands

-Neurology and psychiatry
- How to write a patient file, a summary of the history and clinical and paraclinical findings, patient list (Problem list) and solutions (Plan), differential diagnoses and writing a daily report

The main references of the course:
Barbara Bates Semiotics and Other Up-to-date sources (Latest Edition)
Student evaluation method in different areas:

1- Active presence in the class
2- Completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course Code: 39

Course Name: Semiology and Physical Examinations Practicum
Prerequisite or concurrent: Semiology and Physical Examinations (Theoretical)
Number of credits: 1 credit
Credit type: Practicum

General purpose of the course:
Taking a history and performing physical examinations of the patient and recording and reporting the results of the examination.

Course description: By passing this internship credit, students will learn how to take a history and perform physical examinations of the patient and how to record and report the results of the examination.

Outline: (51 hours)
- Preparing a history of the patient
- Complete examination of various organs and systems of the body
- Distinguish normal from abnormal cases
- Record the results of the findings

In clinics and inpatient wards, preferably midwifery and gynecology, including taking a history and performing physical examinations and diagnosing abnormalities under the supervision of a midwifery instructor and an internal medicine specialist as a clinical professor.
During 12 days (4 hours a day and 1.2 hours with 15 minutes of rest) the following should be done for at least 10 patients.
(There is no problem in doing more than what is set by the student)

Breast examination: Observe: size, symmetry, shape and appearance Breast skin, color, thickening or edema Venous, nipples Touch: Tissue consistency, Sensitivity, Nodules, Secretion, Examination of axillary and supra lymph nodes and infraclavicle	Investigation of lymph nodes, peripheral and central pulses, JVP jugular veins	How to deal with the patien and start the interview
Cardiac examination: Observe: PMI and change in pregnancy PMI Touch: PMI, change in pregnancy PMI Hearing: Normal sounds (S1 and S2) a abnormal sounds (EJ, OS, S4, S3), type of systolic and diastolic murmurs, physiological changes of cardiac hearin during pregnancy	Head and neck examination including: Skull, face (in terms of shape, symmetrical fracture, depression, protrusion), trachea, thyroid	Get a complete history of th disease References: General characteristics, mai complaint, recent discomfo description, medical record personal and social records, family records and a review different body systems (at least for 10 different patien

Abdominal examination: Observe: Abdominal skin, umbilicus, abdomen shape, Enlarged limb symmetry, peristalsis, Aortic pulse Hearing: BS Vascular sounds Percussion: normal sounds (tympanum resonance) and abnormal sounds Touch: superficial touch, deep touch, liver, spleen, kidney, tenderness, rebou tenderness, CVA tenderness, pain examination, ascites evaluation, appendicitis evaluation	Ear examination includes: Outer ear, eardrum, inner ear, whisper test	Description of the general condition of the patient including: level of consciousness, patient's condition at the time of examination, degree of pati cooperation
Examination of limbs and spine includi Examination of the joints of the limbs including: observation of color and swelling, touch of swelling and heat, restriction of movement, examination c the spine: observation of shape, change curvature and protrusion, touch of sensitivity, restriction of movement	Throat and nose examination including: Throat, external nose, external cavity, sinuses	Height, weight and body m index (BMI)
Psychological examination: mental stat level of consciousness, cranial nerves, motor and sensory nerves, reflexes	Eye examination including: External and internal structure of eye, vision, eye movements	Examination of vital signs
Prepare the final report of the history a examinations Participate in questions and answers an study theoretical topics determined by instructor	Examination of the lungs (anterio and posterior) including: Observation: Speed, rhythm, dept and respiratory effort, chest shape and movement Touch: Determination of sensitive areas, Evaluation of respiratory dilation, Evaluation of tactile vibration Accuracy: Evaluation of different parts of the lung Hearing: Recognition of normal lu sounds and their location (vesicul bronchocular, bronchial and tracheal), abnormal lung sounds, crackle, wheezing, ronca, friction Rob) and transferable speech sour	Examination of the skin and appendages including: Color, humidity, heat and skin, color, Consistency, shape and ang of nails, distribution of hair loss

The main references of the course:

Barbara Bates Semiotics and Other Credible Up-to-date sources (Latest Edition)

Student evaluation method in different areas:

1- Active presence in the class
2- Completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course Code: 40

Course Name: Physiopathology and Medical Diseases (1)

Prerequisite or Concurrent: All Basic Science Courses – Semiology and Physical examinations (Theoretical)

Number of credits: 3 credits

Credit type: Theoretical

General purpose of the course:

1- Recognizing the basic needs and diagnosing human conditions during health and illness, especially pregnant women

2- Applying scientific findings and providing services and education to patients and pregnant and vulnerable women, providing medical assistance and correct referral in necessary cases.

3- Recognizing the responsibilities and limitations of the profession and adhering to the observance of scientific, ethical and legal standards when providing services in order to protect the lives of mothers and children and ensure their health.

Course description: This course helps students to get familiar with major cardiovascular, respiratory, urinary and gastrointestinal diseases and their causes, how to diagnose, cause and treat them, and use this knowledge to identify pregnancies associated with such diseases.

Outline: (51 hours)

A. Cardiovascular and circulatory system

General purpose of the course:

1- Full acquaintance with the physiopathology of heart diseases and circulatory system

2- Familiarity with the manifestations and clinical signs of cardiovascular diseases based on physiopathology and examination of heart patients

3- Familiarity with the methods of diagnosis and management of various heart diseases and their process during pregnancy and childbirth and after childbirth

Outline: (18 hours):

1- Briefly electrical activities of the heart, blood circulation, nerves and regulation of myocardial metabolism

2- Manifestations and clinical signs of cardiovascular diseases based on physiopathology and examination of heart patients (pain, shortness of breath, palpitations, edema, syncope, cyanosis, etc.), examination of the general condition of the patient, examination of arteries and blood pressure measurement, Cardiac examination, observation, touch and examination of anterior heartbeats, hearing, examination of natural sounds based on physiology and physiopathology, types of murmurs and their mechanism

3- Principles of electrophysiology of normal heart, basics of generation and propagation of electric waves, arrhythmia and conduction disorders, blocks, hypertrophies and pacemakers
   - Types of heart disease with emphasis on cause, physiopathology, symptoms, differential diagnosis, treatment, prognosis and prevention in non-pregnancy and pregnancy including:

4- Rheumatic fever

5- Valvular heart disease (stenosis, insufficiency, prolapse)
6- Congenital heart diseases, especially its common types
7- Increased arterial blood pressure
8- Reduction of arterial blood pressure (syncope, hypovolemic and normo-volemic shock)
9- Cardiac muscle diseases: myocarditis and cardiomyopathies
10- Heart failure: its types and emergencies
11- Infectious endocarditis and pericardial diseases
12- Coronary artery diseases (ischemia, angina pectoris, infarction)
13- Increased blood pressure in the lungs and pulmonary heart
14- Cardiovascular changes, volume and blood pressure in pregnancy -Pregnancy after heart surgeries -The use of anticoagulants and other drugs in pregnancy -Care and treatment of pregnant mothers with heart disease in pregnancy and childbirth and after childbirth
15- Resuscitation of the heart and lung
16- CCU

The main references of the course:

Basics of Cecil Medicine - Harrison - Clinical and Physical Examinations - Guyton - Williams Physiology (latest edition)

B- Physiopathology and internal diseases of the respiratory system

General purpose of the course:

Full knowledge of anatomy, physiology and physiopathology, causes, symptoms, diagnosis, treatment, prognosis and prevention of respiratory diseases in non-pregnancy and pregnancy

Outline: (10 hours)

1- Anatomy, physiology and physiopathology, semiotics and mechanism of sounds
2- Infectious diseases (pneumonia, bronchiectasis, tuberculosis, abscess)
3- Obstructive diseases (COPD, asthma)
4- Malignant diseases
5-Pulmonary embolism and respiratory emergencies
6- ICV cases and ventilators and diagnostic parts of lung diseases - ICU
7- ARDS and acute and chronic lung failure
8- A brief list of diseases of pleura, mediastinum, diaphragm

The main references of the course:

Cecil Medicine, Harrison Medicine, Williams (latest edition)

C- Physiopathology and internal diseases of the urinary system

General purpose of the course:

Full knowledge of anatomy, physiology, Physiopathology, causes, diagnosis, treatment, prognosis and prevention of urinary tract diseases in non-pregnancy and pregnancy

Outline: (12 hours)

1- Anatomy, physiology, renal blood flow, filtration and its regulating factors, effect of vasoconstrictors, transport of sodium, potassium, water and hydrogen, etc., renin and angiotensin system, regulation of calcium, phosphorus and vitamin

2- Physiopathology of urinary tract and symptoms of kidney diseases including hematuria, proteinuria, dysuria, polyuria, oliguria, edema, etc.
3- Laboratory diagnostic methods in kidney diseases and interpretation of tests, especially urinalysis
4- Acute and chronic glomerulonephritis
5- Acute and chronic renal failure
6- Kidney and urinary tract infections and interstitial nephritis
7- Nephrotic syndrome
8- Kidney and pregnancy, kidney and drugs
9- Water, electrolytes and acid and base disorders
10- Primary hypertension and medications
11- Summary of kidney and collagen diseases, systemic diseases and congenital diseases and tumors

The main references of the course:

Sicilian Medicine, Harrison Medicine, Williams Pregnancy and Obstetrics (Latest Edition)

D- Physiopathology and internal diseases of the gastrointestinal tract

General purpose of the course:

Student's familiarity with anatomy, physiology, physiopathology, causes, diagnosis, treatment, prognosis and prevention of gastrointestinal diseases in non-pregnancy and pregnancy

Outline: (11 hours)

1- Esophagus: Physiology, mechanism of swallowing and sphincters, physiopathology, symptoms of esophagus (dysphagia, pain, regurgitation and odynophagia), esophagitis with related cases in pregnancy
2- Stomach and duodenum: physiology (mechanism of gastric emptying, mechanism of gastric secretion), physiopathology, diagnosis and treatment of indigestion (dyspepsia), gastric and duodenal ulcers, gastritis, cancer, ulcers and related diseases Pregnancy
3- Small intestine: physiology (bowel movements, mechanism of water and electrolyte absorption, proteins, fats, carbohydrates, vitamins, iron, phosphorus and calcium), physiopathology, diagnosis and treatment of malabsorption syndrome, intestinal parasites and intestinal parasites Important small intestine such as tuberculosis, ulcerative colitis, microbial growth syndrome and protein loss, and briefly tumors

Colon: Physiology (mechanism of excretion and movements of the large intestine, absorption of water and salt and rectal sphincter), physiopathology of diarrhea and types of diarrhea, ulcerative colitis, infectious colitis, neural colitis, tuberculosis and a brief diverticulum

5- Liver: Physiology (role of liver in carbohydrate metabolism, proteins, fats and mechanism and stages of bile secretion), physiopathology, diagnosis and treatment of common diseases such as gallstones, jaundice, jaundice, cirrhosis, hepatitis and hepatitis And tumor
6- Pancreas: Physiology of secretion, physiopathology, diagnosis and treatment of acute and chronic pancreatitis

The main references of the course: Harrison Medicine - Cecil Medicine - Pregnancy and Obstetrics Williams (latest edition)

Student evaluation method in different areas:

Active attendance at class and participation in the final exam

Course Code: 41

Course Name: Physiopathology and Medical Diseases (2)
Prerequisite or concurrent: Physiopathology and Medical Diseases (1)
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course:

1- Recognition of basic needs and diagnosis of human conditions during health and disease, especially in pregnant women
2- Applying scientific findings in providing services and education to patients and pregnant and vulnerable women and providing medical assistance and correct referral in necessary cases
3- Recognizing the responsibilities and limitations of the profession and adhering to the observance of scientific, ethical and legal standards when providing services in order to protect the lives of mothers and children and ensure their health.

Course description: This course helps students to become familiar with major diseases of the blood, glands, nerves and connective tissue and their causes, how to diagnose and treat them, and apply this knowledge in connection with pregnancies associated with such diseases.

Outline: (34 hours):

A- Physiopathology and internal blood diseases

General purpose of the course:

Student's familiarity with physiology, physiopathology, causes, diagnosis, treatment, prognosis and prevention of various blood diseases in non-pregnancy and pregnancy

Outline: (8 hours):

1- Physiopathology and definition of anemia, erythrocyte indices, anemia classification, compensatory mechanisms, signs and symptoms of anemia
2- Iron metabolism and iron deficiency anemia
3- Hemolytic anemia (intravascular and extravascular)
4- Megaloblastic anemia, especially folate deficiency
5 - Physiopathology of white blood cells (leukopenia, leukocytosis)
6- Physiology and physiopathology of homeostasis
7- Types of coagulation disorders
8- Blood products, their application and side effects
9- Thalassemia, principles, diagnosis and prevention
10- How to deal with and how to manage a patient with acute bleeding and shock
11- Leukemias and a brief summary of lymphomas

Main references of the course: Cecil Medicine - Harrison Medicine – Williams

B. Physiopathology and endocrine diseases

General purpose of the course:

Familiarity with physiology students, physiopathology, causes, symptoms, diagnosis, treatment, prognosis and prevention of various endocrine diseases in non-pregnancy and pregnancy

Outline: (12 hours):

1- General endocrinology: definitions of hormone and endocrinology, feedback system, receptors, hormonal deficiencies, hormone increase, Hormone resistance

Hypothalamic and pituitary diseases: Physiology and relationship between hypothalamus and pituitary gland, releasing hormones, stimulating hormones, increase and decrease of GH, pituitary adenomas (with and without prophylaxis), hepatic

3- Thyroid diseases: thyroid physiopathology, thyroid tests, thyroid scan, hypothyroidism (causes, complications, symptoms and treatment), hyperthyroidism (causes, complications, symptoms and treatment), hyperthyroidism, thyroiditis, thyroiditis Ovarian and pregnancy, Thyroid cancers (nodules), Parathyroid disease

4- Diabetes: Definition of types of diabetes and physiopathology, clinical symptoms, acute and chronic complications of diabetes, principles of treatment, types of drugs, hypoglycemic and hyperglycemic shock

Genital diseases: sex differentiation, ovarian physiopathology and hormonal disorders (causes and symptoms) including ovarian tumors (causes, signs and treatment), hirsutism, testicular diseases (primary and secondary hypothyroidism, secondary and secondary causes,

6- Adrenal diseases: physiology, importance of adrenal hormones, diagnostic tests, adrenal diseases, primary hypothyroidism, secondary hypothyroidism, Cushing's syndrome, primary aldosterone increase, adrenal tumors, benefits and side effects of corticosteroids

Main course references:

Cecil Medicine, Harrison Medicine, Williams Pregnancy and Maternity (latest edition)

C- Physiopathology and internal diseases of nerves

General purpose of the course:

Familiarity of students with physiopathology, causes, symptoms, diagnosis, treatment, prognosis and prevention of various neurological diseases in non-pregnancy and pregnancy

Outline: (8 hours):

1- Neurological examinations

2- Pain physiology, physiopathology, diagnosis and treatment of headaches

3- Cerebral circulation and cerebrovascular lesions

4- Epilepsy

5- Physiopathology of peripheral nerves, diagnosis and treatment of neuropathies

6- Physiopathology of spinal cord Diagnosis and treatment of various spinal cord lesions

7- Types of myopathy and motive plate diseases

8- Multiple sclerosis

9- Disorders of the locomotor system

10- Vegetable system and body heat disorders

11- Brain space lesions (tumor, abscess, hematoma)

12- Increased intracranial pressure

13- Etiology, physiopathology and mechanism of coma, localization of lesions, diagnosis and treatment of coma

14- Dizziness
15. Common degenerative diseases such as dementia
Main references of the course: Cecil Medicine, Harrison Medicine, Williams Pregnancy and Obstetrics (Latest Edition)

D- Physiopathology and internal diseases of connective tissue
General purpose of the course:
Familiarity of student with physiology, physiopathology, causes, symptoms, diagnosis, treatment, prognosis and prevention and rehabilitation of connective tissue diseases in non-pregnancy and pregnancy
Outline: (6 hours):
1- Basics, preparations and physiology of connective tissue - physiology, structure and biomechanics of joints and joint sources and physiopathology of rheumatic diseases
- Immunology and inflammation in joint diseases
- Laboratory diagnostic methods, principles of treatment and rehabilitation
2- Joint degenerative diseases, inflammatory diseases of collagenoses, rheumatic fever, rheumatoid arthritis, lupus
Erythematosus, Periodic rheumatism, Myositis vasculitis, Metabolic joint diseases, Joint infections
Main references of the course: Harrison Medicine, Cecil Medicine, Guyton Physiology (latest edition)

Student evaluation method in different areas:
Active attendance at class and participation in the final exam

Course Code: 42

Course Name: Physiopathology and Medical Diseases (3)
Prerequisite or concurrent: Physiopathology and Medical Diseases (1) and (2)
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course:

1- Recognizing the basic needs and diagnosing human conditions during health and illness, especially pregnant women
2- Applying scientific findings in providing services and education to patients and pregnant and vulnerable women and providing medical assistance and correct referral in necessary cases
3- Recognizing the responsibilities and limitations of the profession and adhering to the observance of scientific, ethical and legal standards when providing services in order to protect the lives of mothers and children and ensure their health.

Course Description: This course helps students to become familiar with major skin, sexually transmitted and infectious diseases and their causes, how to diagnose and treat them, and general principles of care for internal diseases and surgery, and to apply this knowledge in connection with pregnancies associated with such diseases.
Outline: (34 hours):
A- Physiopathology and skin and sex diseases
General Purpose of the course: Student's acquaintance with physiopathology, causes, symptoms, diagnosis, treatment, prognosis and prevention of various skin and sexually transmitted diseases in non-pregnancy and pregnancy

Outline: (14 hours):

Anatomy, physiology, semiology, physiopathology, symptoms and principles of treatment of skin diseases including:
1- Dermatitis
2- Urticaria and allergies
3- Collagen diseases
4- Psoriasis, but plan
5- Longitudinal skin diseases
6- Parasitic, microbial, fungal and viral diseases of the skin
7- Moles, pigmentation, itching
8- Skin diseases during pregnancy
9- Syphilis, chancroid, LGV, donovanosis
10- Other sexually transmitted diseases including herpes, gonorrhea, UTI, warts, groin dandruff, trichomonas, etc.
11- Benign and malignant skin tumors
12- Common skin diseases in children and infants and congenital cases
13- Hair health and strengthening and common hair diseases and the effect of pregnancy and lactation on hair

14- Nutrition and chemical and herbal medicines useful for skin and hair for health, protection and freshness of skin and hair and prevention

Main references of the course: Harrison Medicine, Cecil Medicine and Books on Skin and Hair Diseases (Latest Edition)

B- Physiopathology and infectious diseases

General purpose of the course:

Familiarity of student with physiopathology, causes, symptoms, diagnosis, treatment, prognosis and prevention of various infectious diseases in non-pregnancy and pregnancy

Outline: (12 hours):

1- Microbial virulence, pathogenesis of infections (causes, sources, mode of transmission, body defense, disease stages, incubation period, attack, establishment, diagnosis, general principles of treatment, prevention), vaccine and serum (immunoglobulin), patient isolation , Control of carriers, international measures

2- Fever: body temperature control, pathogenesis of fever, febrile diseases, diseases with hypothermia, causes of fever, clinical significance, types of fever, exposure to fever, epidemiology of fever, transient drug febrile diseases, chronic and chronic diseases

3- The body's defense mechanism in infectious diseases: skin and mucous membranes, body secretions, polymorphonuclears, lymphocytes, macrophages, immunoglobulins, complement system, body reactions in immune and enterogenic reactions, cervical skin tests

Infectious shock: Causes, symptoms, cell damage and hemodynamic changes

5- Gram-positive cocci infections (Streptococcus, Staph)

Gram-negative bacilli infections (meningitis, urethritis) and gram-positive bacilli infections (listeria)

7- Principles of treatment with antibiotics

Gram-negative bacilli infections (cholera, Salmonella, Haemophilus, Shigella, Brucella)

9- Spirochetes infections (syphilis), aerobic infections (tetanus, botulism, bacteroids)

10. Mycobacterial infections (tuberculosis), leprosy

11- Common protozoan and protozoan infections (amoeba, malaria, Toxoplasma, Trichomonas, Giardia, Leishmania)

12- Viral infections (flu, herpes, poliomyelitis, smallpox, hepatitis, AIDS, rabies, adenovirus)

13. Mycoplasma infections (pneumonia, urethritis), chlamydial infections (ocular, vaginal and urethritis)

14- Rickettsia infections, common parasitic (worm) infections

Main references of the course: Harrison Medicine, Williams Pregnancy and Obstetrics, Infectious Diseases in Iran (Latest Edition)

C- Concepts and principles of care for internal patients and surgery

General purpose of the course:

Familiarity of students with basic human needs and concepts and principles of inpatient care and surgery in non-pregnancy and pregnancy

Outline: (8 hours):

1- Basic human needs during health and illness (physical, mental, social) and different opinions in this field, such as classification of needs according to Maslow et al. Theory, familiarity with care theories, especially midwifery theories.
2- Familiarity with the concepts of health and disease, pain (types, causes, care), sleep (stages, deprivation, complications and care), coma and care, death (stages and care)
3- The process of caring for patients (diagnosing problems and priorities, planning, implementation and evaluation) The process of caring for a mother who has lost her child due to abortion or death after birth, the process of caring for a mother who suffers from postpartum depression The process of caring for a diabetic pregnant mother, the process of caring for a pregnant woman with preeclampsia, and so on.
4- Care before, during and after surgery, the process of caring for a cesarean section mother, the process of caring for a woman who has had a hysterectomy, for example, the process of caring for a woman whose breast or ovary has been removed, etc.
5- Care of nosocomial infections (prevention, eradication)

Main Course References: Internal Medicine Books, Principles of Surgery Books, Nursing and Midwifery Care Books (latest edition)

Student evaluation method in different areas:
Active attendance at class and participation in the final exam

Course Code: 43

Course Name: Physiopathology and Surgical Diseases
Prerequisite or concurrent: Physiopathology and Medical diseases (1), (2) and 3
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course: 1- Familiarity of the student with the generals of surgery, body fluids, acid and base balance
2- Familiarity of student with gastrointestinal, cardiovascular and breast surgeries, urinary system, endocrine system, neurology, eyes, ear, throat, nose and orthopedics
Course description: This course helps students to become familiar with the basics of surgery and water and electrolyte and the types of diseases of different devices that require surgery and their causes, diagnosis and treatment, and to apply this knowledge in connection with pregnancies associated with such diseases.

Outline: (34 hours):

A. General surgery, water and electrolytes
General Purpose of the course: Familiarity of students with general surgery, body fluids, acid-base balance, electrolytes, fluid therapy, coping with shock in non-pregnancy and pregnancy
Outline: (6 hours):
1- Water and electrolytes, especially in operated patients, the natural composition of body fluids and electrolytes, water and electrolytes needed by operated patients, factors that cause deficiency and change in the amount needed
2 - Abnormal loss of body fluids and fluid shifts and deficiency and increase in fluid volume and electrolytes and its effects on body organs such as heart, arteries, kidneys, etc.
3- Acid and base balance (types of acidosis and alkalosis)
4- The importance of nutrition in patients with surgery and intravenous nutrition, nutrition and fluid therapy in severe vomiting of pregnancy
5- Surgical homeostasis and bleeding, examination of the patient for bleeding and anticoagulants
6- Blood transfusion and its problems
7- Hemorrhagic shock and gram-negative and infectious shock
8- General surgical infections

Main references of the course: Principles of Schwarz thesis surgery and similar books (latest edition)

B- Gastrointestinal surgeries
General Purpose of the course: Familiarity of students with important gastrointestinal surgeries, especially in pregnancy
Outline: (4 hours):
Abdominal (diagnosis and treatment) especially appendicitis - Trauma and intra-abdominal bleeding - Surgery of esophagus, stomach and intestines, intestines, liver and gallbladder - Intestinal obstruction in non-pregnancy and pregnancy
Main Course References: Surgery Books (Last Edition)

C- Cardiovascular and breast surgeries:
General purpose of the course:
Familiarity of students with important heart, vascular and breast surgeries in non-pregnancy and pregnancy
Outline: (2 hours):
1- Large cardiovascular surgeries, angiography, lung surgery
2- Breast surgeries (partial, complete removal, prosthesis)
3- Aneurysm surgeries, varicose veins, emboli
The main references of the course: surgery books

D. Urinary tract surgeries
General Purpose of the course: Familiarity of students with important urinary tract surgeries in non-pregnancy and pregnancy
Outline: (2 hours):
Includes urinary tract stones, abnormalities, traumas, especially in gynecological surgeries, abnormalities, tumors, and effusions.
Main Course References: Surgery Books (Last Edition)

E. Endocrine surgeries
General purpose of the course:
Familiarity of students with important gland surgeries in non-pregnancy and pregnancy
Outline: (2 hours):
Thyroid, adrenal and parathyroid surgeries
Main Course References: Surgery Books (Last Edition)

And - Neurosurgery
General Purpose of the course: Familiarity of students with important neurosurgeries
Outline: (2 hours):
Includes concussions and cerebral hemorrhages, vertebral and disc injuries, spinal cord injuries and bleeding, intravascular lesions, congenital diseases and tumors, especially in the pituitary gland.

Main Course References: Surgery Books (Last Edition)
G. Orthopedics
General Purpose of the course: Student's acquaintance with physiology, physiopathology, symptoms, causes, diagnosis, rehabilitation treatment of orthopedic diseases in non-pregnancy and pregnancy and infants and children
Outline: Orthopedics (6 hours):
1- Examination of joints and bones and orthopedic examination of the patient, orthopedic examination of the infant, diagnostic tests, photography and treatment
2- Definition of fracture, division, symptoms, definition of dislocation, emergencies and treatment
3- Mechanism of healing bones, tendons and ligaments, non-healing and late healing

4- Open fracture with wound, complications of fractures (embolism, gangrene, tetanus, osteomyelitis, ischemia, Leckman)
5- Important bone fractures (symptoms and treatment)
6- Important dislocations (arm, shoulder, vertebra, hip joint)
7- Rupture and dislocation of ligaments (knee, foot and 2)
8- Bone and joint infections
9- Congenital anomalies: hip dislocation, clubfoot, metatarsus varus, hallus varus, syndactyly, polydactyly, macrodactyly, springling, congenital patellar dislocation
10 - Bone softness in children and osteoporosis, especially in menopause and old age
11- Myositis, poliomyelitis, cerebral palsy
Carpal tunnel syndrome and similar cases, aseptic necrosis
13- Rheumatoid diseases, joint relaxation in pregnancy
14- Tumors, amputation and artificial organs
15- Rehabilitation
Main course references: Surgery and orthopedic books (latest edition)

H- Ear and nose
General Purpose of the course: Student's acquaintance with anatomy, physiology, physiopathology, causes, symptoms, diagnosis and treatment of ENT diseases
Outline: (6 hours):
1- Anatomy and physiology of the ear and audiometry
2 - Common and common ear diseases: external ear and tympanic membrane, otitis media and its complications, inner ear and deafness, tinnitus, dizziness, rupture of tympanic membrane, speech injuries, related neurological diseases
3- Anatomy and physiology of nose, throat and larynx and their important diseases including sinusitis, polyps, tonsils, third tonsils, vocal cords, etc.
4- Anatomy and physiology of bronchospasm and its important diseases
5- Important ear, nose and throat problems in pregnancy and in the baby such as anesthesia, etc.
6- The effects of drug use on congenital ear problems in the fetus
Main references of the course: Guyton Internal Medicine, Surgery, and Physiology Books (Latest Edition)
I - eyes
General Purpose of the course: Student's acquaintance with anatomy, physiology, physiopathology, causes, symptoms, diagnosis and treatment of eye diseases
Outline: (4 hours):
1- Anatomy and physiology of the eye (eyeball, eyelids, lacrimal ducts, nerves, eyeball muscles), general eye examination, ophthalmic drugs, determination of eye vision
2- Eye diseases, conjunctiva, lacrimal sac and duct, corneal diseases, eyeballs and optic nerve, retinitis especially in pregnancy and eye infections especially in infant
3- Eye lens diseases and refractive errors
Strabismus, glaucoma and cataracts
5 - Ophthalmic emergencies: the entry of substances, rupture toxins, vascular thrombosis, retinal bleeding, especially in hypertension, especially eclampsia of pregnancy

6- Complications of general eye diseases (diabetes, hypertension and infection)
7- Headache and eyes

Main references of the course: Guyton Internal Medicine, Surgery, and Physiology Books (Latest Edition)

Student evaluation method in different areas:
Active attendance at class and participation in the final exam

Code: 44

Course Name: Medical & Surgical Diseases Practicum

Prerequisite or concurrent: Semiology and physical examinations and its practicum - Physiopathology and Medical diseases 1, 2 and 3 - Physiopathology and surgical diseases

Number of credits: 1 credit

Credit type: Internship

General purpose of the course:

- Recognition of basic needs and diagnosis of human conditions during health and disease, especially pregnant women.
- Familiarity with internal diseases and surgery and emergencies (mentioning the effects of pregnancy and childbirth on the disease and the disease on pregnancy and childbirth)

Ability to identify the patient's problems and needs and the ability to make appropriate decisions to take the necessary measures from him

Recognize professional responsibilities and limitations, adhere to the observance of ethical principles and Islamic standards when providing services in order to protect the lives of mothers and children and ensure their health.

Course description: During this internship, students will get familiar with how to diagnose, manage, treat and care for pregnant women with internal diseases and surgery.

Outline: (51 hours):

1- Taking the history and performing physical examinations of patients

2- Familiarity with important and common diseases of heart, lung, blood, glands ...

3- Diagnosis of internal emergencies and surgery in pregnant women

4- Acquiring the ability to perform necessary measures and care for patients

During 12 days (4 hours a day and 1.2 hours with 15 minutes of rest) at least about 25 different patients Note: (Doing more than what is determined by the student is not a problem)

Common glandular diseases (such as diabetes, hypothyroidism and hyperthyroidism, Sheehan syndrome, Cushing, etc.)	Diagnosis and observation of urine and treatment of internal emergencies and surgery	Prepare an accurate history of the patient
Neurological diseases (headaches, epilepsy, CVA)	Diagnosis of common diseases of various organs of the body that follows according to history and physical examination, request, interpretation of tests and paraclinics, as well as observation and evaluation of their treatment, including the necessary care, providing the necessary training, recognizing relevant drugs and ...	Perform a complete physical examination of the patient
Common urinary tract diseases (including renal and urinary tract infections, acute and chronic renal failure, glomerulonephritis and urinary stones, etc.)		Diagnosis of abnormalities in history and examination
Common infectious diseases such as rubella, hepatitis, herpes,		Request the necessary tests as needed

etc.	relying on Their importance in conceiving during 12 days includes 20 internal cases (2-3 cases from each device) and 5 surgical cases including:	
Gastrointestinal (such as wounds, infections, diarrhea, constipation, bleeding, indigestion, etc.)	Cardiac (mitral stenosis, mitral prolapse, increase and decrease of arterial blood pressure, coronary artery disease ...)	Analysis of abnormalities of important paraclinical tests
Skin diseases and allergies (hives, itching, fungus, viruses and parasites, pigmentation, etc.)	Vascular (heart failure, arterial embolism, thrombophlebitis, varicose veins, etc.)	Analysis and recognition of changes in important paraclinical tests during pregnancy and its interpretation
Motor and collagen (carpal tunnel syndrome, major bone fractures, joint relaxations, rheumatic fever, rheumatoid arthritis, lupus, bone and joint infections)	Respiratory (pneumonia, tuberculosis, asthma, pulmonary embolism, restrictive and obstructive diseases, etc.)	Quickly obtain the required information from the patient's file
		Provide a correct and accurate report of the patient's condition to the instructor
Common surgeries (including appendicitis, heart surgery, stones, varicose veins and hemorrhoids, thyroid, breast, etc.	Common blood diseases (including iron deficiency, thalassemia, bleeding diseases, etc.	Participate in questions and answers and study theoretical topics selected by the instructor

Main course references: Like the theoretical courses of physiopathology of internal diseases 1, 2 and 3 and surgical diseases

Student evaluation method in different areas:

1. Active presence in the internship
2. Obtaining a history and performing physical examinations and how to use tests and paraclinics in achieving the required diagnosis, care and treatment measures.
3. How to do the assigned tasks
4. Participate in the final exam

Course Code: 45

Course Name: Communication, Health Education and Counseling in Maternal, Child and Reproductive Health (Health 3)

Prerequisite or concurrent: Principles of Public Health Services (Health 1) - General, Woman and Family Psychology - Pregnancy and Normal Delivery (1) - Neonatology - Pediatric - Principles of Maternal and Child Nutrition

Number of credits: 1 credit

Credit type: theoretical

General purpose of the course:

- Principles of communication with the client
- Health education process
- Familiarity with the counseling process
- Application of the above in reproductive and maternal health of the child

Course description: During this course, students are introduced to the principles of communication, health education and counseling and learn how to use them in reproductive health and mother and child.

Outline: (17 hours):

Communication, definition, importance, elements and effective factors in it, principles of communication, effective communication, role of mass media, types of communication (verbal and non-verbal communication, interpersonal communication and its skill model), role and importance of communication in midwifery

Objectives, philosophy, principles and principles of health education, group dynamics

The process of health education includes establishing the right relationship with the client, collecting information, identifying needs and priorities, selecting the appropriate training method, training the client and evaluating the effect of the training with emphasis on evaluating the client's performance and changing health behavior.

Prepare a health education program based on the process to solve a health problem related to women (implementation of the program individually or in groups by playing a role in the classroom or during the internship, at home or in health centers).

Provide a health education program for family, school or community

Definition of counseling, principles and goals of counseling, counseling techniques and skills, role of midwife in counseling with mother, child and family, attention to the rights of clients and patients and religious issues in counseling, correction of rumors and misconceptions

Evaluate a counseling session, the role of the midwife as a counselor in cases such as puberty, before and after marriage, family planning, pre-pregnancy, pregnancy and classes related to childbirth, childbirth, postpartum and lactation, menopause and old age

Main course references:

1- Social Prevention Medical Textbook, Park, John Edret. Last Edition.

2- Methods and techniques of counseling, Shafi Abadi, Abdullah. The latest edition.

3- Principles of Interpersonal Skills, Ministry of Health and Medical Education,
4- Health Education, Ramachandran, L. The latest edition
5- Public Health, Razavi et al. (Latest edition)
6- Dr. Mohseni's communication book, latest edition
7- Interpersonal Communication Skills in Reproductive Health and Family Planning - United Nations Population Fund Support Group, IEC Center Group Translation, Ministry of Health - Population Information and Training Center, Population and Family Planning
8- Basic concepts and specialized topics in counseling, Goldard, David, translated by Hosseinian, Simin - latest edition
9- Communication for Health, Hubble, John - in collaboration with WHO Representative Office
10- Changing the behaviors of children and adolescents, Cromboltz, John Dee, Cromboltz, Helen, latest edition
11- Other reliable up-to-date sources

Student evaluation method in different areas:

1- Active presence in the class
2- completing and submitting assignments
3- Participation in the midterm exam
4- Participation in the final exams

Course Code: 46

Course Name: Maternal, Child and Reproductive Health (Health 4)
Prerequisite or concurrent: Health 3
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course:

Promoting the necessary knowledge and attitude in the field of health before marriage, during pregnancy and after delivery.

Acquiring the necessary knowledge and attitude in the field of maternal and child health to ensure the physical, mental and social health of mother and child

Identify needs and priorities, plan based on health education process, prepare, implement and follow up health education programs for mother, family, community

Acquiring knowledge and attitudes about the health of vulnerable groups

Acquiring knowledge and attitudes about various methods of family planning as well as the importance of population and demographics

Course Description: During this course, students will be introduced to reproductive health services in the field of premarital, marital, pregnancy and postpartum health and maternal and child health, family planning and vulnerable groups.

Outline: (34 hours):

1- Introduction (2 hours)

- Definition of reproductive health, mother and child and family planning, philosophy, goals, principles and their scope

-Familiarity with health and hygiene teams and family physician and the role and duties of midwives in the family physician team and other parts of the health system

- Review of PHC and MCH services and the role of midwives in it - Reproductive and maternal and child health services and family planning in Iran and the world

- Sustainable development of countries and the role of healthy manpower - The importance of social determinants of health (SDHs) The importance of population and population indicators and their definition - Health indicators and their importance and definition

- Importance of population and demographic indicators and their definition of Health indicators and their importance and definition

- MDG goals of the third millennium related to reproductive health and the situation in Iran in achieving these goals

2- Maternal health (6 hours)

-Puberty health (adaptation to physical, psychological and social changes, nutrition, exercise, menstrual health)

-Necessary health and medical examinations and education and counseling before marriage and marriage, a review of counseling and care before pregnancy (based on existing national guidelines)

- A review on the health and care of pregnant women based on the social health and family health of pregnant women and programs and classes for childbirth
- Review of women's health in the postpartum period and breastfeeding and postpartum care for up to 2 months according to the protocol of the Ministry of Health
- Women's sexual health and relationships and marital satisfaction
- Women's social health: the problem of economic security, hard work, environmental pollution, domestic violence, work laws for pregnant and lactating women, non-pregnant and head of household and homeless
- Family and community support for pregnant and lactating women and relevant national and international laws and support organizations

3- Infant and child health (10 hours)

The importance and role of infant and child physical health Importance and role of breastfeeding include:- breastfeeding and bounding and attachment during first hour of the life-The correct breastfeeding technique and the side effects of not following those techniques- Factors affecting breastfeeding decline-Ways to prevent and treat breastfeeding problems-Methods of storing, freezing and thawing breast milk-The role of breastfeeding counseling and training - Strategies of child-friendly hospitals - Empowerment of parents in infant care - The importance of emotional communication between child and parents, especially in infancy (first 28 days)
- The role and importance of kangaroo care in the care of infants, especially premature infants (alternative to incubator)
-Different stages of growth and development from birth to adolescence and developmental psychology
- Monitoring the psychological, social and cognitive development of the child
- Drawing and interpreting growth curves, diagnosing growth and development disorders and taking necessary actions
- Periodic examinations of the child and attention from the mouth and teeth
- Contributing factors, ways to prevent and care for common problems in children such as teething, bloating, abdominal pain, enuresis, nail biting, vomiting, constipation and lack of appetite, diarrhea and acute respiratory infections in children
- A review of infant and child nutrition at different ages up to adolescence
- Public immunization program for mothers and children based on the instructions of the Ministry of Health, vaccine side effects and training of clients
-Integrated care of a healthy child (especially non-physician) including: evaluation and classification of the child, consultation with the mother, follow-up and growth charts
- Integrated pediatric care (for non-physicians) including: assessment and classification of the child, treatment of the child (before referral and based on chart classification), follow-up of the child, consultation with the mother, nutrition, time of referral - infant (under 2 months): Evaluation and classification, treatment and consultation with the mother and follow-up
- Infant and child mental health, communication with other family members, the importance of caressing and training, punishment, reward, daily life plan of the child, games, etc. and their effect on the child's mental health

- Child social health (relationships with family members and playmates, kindergarten and preschool, play and its effect on the child's physical, mental and social health, acceptance of the child as an individual and appropriate behavior, child sexual and physical abuse
- Pre-school and school age health, school health
- Health of children with physical and mental disabilities, rehabilitation and its types
- Familiarity with the instructions of the Ministry of Health regarding child care and ongoing screening projects after birth and infancy and childhood

4- Health of vulnerable groups (6 hours)

- Definition and classification of vulnerable groups with emphasis on screening
- Vulnerable social groups including street women (sex workers) - female prisoners - addicts - fugitives - residents in rehabilitation centers
- Vulnerable health groups including mothers, children, the elderly, the disabled and the retarted and referral and follow-up in cases of problems
- Definition of old age and its stages, elderly health including lifestyle, mental health
- Common diseases in old age, supplement therapy
- Support for the elderly, adaptation to the conditions of old age
- Introduction of the Convention on the Rights of the Child - Reproductive rights

5- Population and family planning (10 hours)

Types of family planning methods and new methods of prevention (application, mechanism of action, complications, follow-up, etc.), education and counseling of family planning and evaluation of Couples-Years of Protection (CYP) family planning programs and other indicators of evaluation and planning of family planning and ceep index

Main course references:

1- Resources related to pregnancy and childbirth courses and gynecological diseases, latest edition
2- Resources related to health courses 1, 2 and 3 and principles of nutrition and nutrition therapy for mothers and children, latest edition
3- Social Prevention Medical Textbook, Park, John Edret. The latest edition.
4- Integrated care of a healthy child (especially non-physician) Ministry of Health, Deputy of Health, Family Health Office, Children Department
5- Integrated care of pediatric diseases (especially non-physicians), Ministry of Health, Deputy of Health, Family Health Office, Children's Office 2007
6- Guide to providing family planning services (first level and second level) in two volumes - Ministry of Health, Deputy Minister of Health, Family Health Office and Population
7- Description of services of health team and family doctor, Ministry of Health, Health Programs Management Office, Health Programs Review Committee, Network Development Center
8- Investigation of Unintended Complications of Immunization (AEFI Surveillance), World Health Organization, Translation: Ministry of Health, Deputy of Health, Center for Disease Management
9- Integrated Maternal Health Care (Out-of-Hospital Services Guide) - Ministry of Health, Family and Population Health Office, Maternal Health Department

10- National Guidelines for Performing Natural Childbirth and Providing Non-Drug Methods for Reducing Labor Pain, Ministry of Health, Family and Population Health Office, Maternal Health Department

11- National Guide to Providing Midwifery and Maternity Services, Mother-Friendly Hospitals - Ministry of Health, Family and Population Health Office, Maternal Health Department

12- Kangaroo Care, Luddington Ho, S, Glant, SK, latest edition

13- Hug care (kangaroo), care guide for premature infants for parents, Ministry of Health, Family and Population Health Office, Neonatal Health Department

14- WHO and UNICEF (last edition), Support and promotion of maternal nutrition in child-friendly hospitals, Ministry of Health, Department of Child Health

15- National system of maternal death care, Ministry of Health, Deputy of Health, Family and Population Health Office, Department of Maternal Health

16- The latest protocols of the Ministry of Health regarding reproductive health, mother and child and family planning and vulnerable groups, nutrition and mental health.

17- The latest health indicators and statistics announced about Iranand other countries of the world by the Ministry of Health and the World Health Organization and other international organizations such as UNICEF, International Children's Fund, International Population Fund, UNESCO, etc.

18- The latest demographic statistics announced by the Statistics Organization 19- Authentic demography books as well as books related to school health

20- Authentic English and Persian books on family planning such as Family Planning Spiroff

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 47

Course Name: Management and Quality Improvement in Maternal, Child and Reproductive Health (Health 5)

Prerequisite or concurrent: Health 1 and 3

Number of credits: 1 credit

Credit type: theoretical

General purpose of the course:

- Familiarity with management in reproductive health services
- Familiarity with quality management and TQM strategy in reproductive health services

Course Description: In this course, students are introduced to quality management and TQM strategy in reproductive health services.

Outline: (17 hours):

- Definition of health services management and the importance of planning
- Planning and implementation of health programs, monitoring, evaluation and follow-up of reproductive health programs, comprehensive quality management and its application in health services
- Definition of quality and continuous quality improvement (CQI) and its importance in reducing costs and increasing the satisfaction of individuals and society, the upgrade system (knowledge, policies, tools and necessary skills)
- Principles of continuous quality improvement, attention to customer needs and expectations, full management commitment, attention to the capabilities and capacities of processes, training of all employees, giving power and authority to employees, use of statistical methods
- Concepts of the system and its components, process and scope
- FOCUS-PDCA model-based process upgrade strategy
- Selecting the process, brainstorming, preparing the workflow diagram, measuring the current performance of the process, diagnosing problems in the way the processes are performed, planning to eliminate the causes and taking appropriate measures to improve
- Convergence diagram and its application in better understanding the problems of a process and choosing the upgrade method
- Writing a program to perform upgrades and report writing
- Community-oriented midwifery Principles of visits

The teaching of this part is done as a training workshop for continuous quality improvement with practical examples of health processes related to mother and child care and family planning. This project will be implemented in groups (for reducing each theoretical hour, 2 practical hours can be held).

Main course references:

- Continuous training of health workers and guidance of the workshop, Abat, FR, Majia, R. Ministry of Health and Medical Education, latest edition.
- Continuous quality improvement workshop, Abolhassan Lamei, Ministry of Health, Treatment and Medical Education. The latest edition

- and other relevant and valid up-to-date sources

Student evaluation method in different areas:

Active attendance in class - How to do homework - Participate in the midterm exam - Participate in the final exam

Course code: 48

Course name: Maternal, Child, and Reproductive Health, and Family Planning Practicum

Prerequisite or concurrent: Health 3 and 4

Number of credits: 2 credits

Credit type: Internship

General purpose of the course:

1- Gaining the ability to consult with mother and family

2- Acquiring the ability to perform health education to mother, family and community (individual or group education)

3- Gaining the ability to perform matters related to the examination of mothers

4- Acquiring the ability to perform matters related to the examination of children

5- Gaining the ability to guide and help mothers, families and vulnerable groups

Course Description: During this internship, students are prepared to acquire skills in mother and family counseling, health education and guidance, and assistance to mothers, families, and vulnerable groups.

Outline: (102 hours)

This internship is held in the field (health centers) under the supervision of a midwifery instructor or teacher.

1- Prescribing different methods of family planning and inserting an IUD of at least 5 cases for each student

2- Performing some measures about the child, including growth monitoring, nutrition, vaccination and diagnosis of abnormal cases, and appropriate action and follow-up

3- Counseling in various cases of marriage, family planning, pregnancy, menopausal issues, preparation for becoming a parent and genetic counseling, etc. by the student

4- Implementation of several educational programs by the student for mother, family and community (individually and in groups)

5- Establishing and communicating properly with other colleagues of the health team and working as a team

24 days (4 hours a day and 1.2 hours with 15 minutes of rest) (there is no problem in doing more than what is set by the student)

Diagnosis, perform care program and education in 1 case of diarrhea, 1 case of respiratory disease, 1 case of thrush, 1 case of hypoglycemia and 1 case of fever	Prescribing injections of 12-18 vaccines for children from each type of vaccine 2 -3 cases	**Family planning:**
Pregnant mother care department:	Prescribing tetanus vaccine for pregnant women 2 cases	Creating a file for new clients 4 cases
Creating a file for new clients 2 cases	Vaccination scheduling based on intervals and type of vaccine for a child who has started his or her	Physical examination of clients

	vaccination schedule correctly and on time 2 cases	
Measurement of height, weight and blood pressure 5 cases	Vaccination scheduling based on intervals and type of vaccine for a child who has not started his or her vaccination schedule correctly and on time 2 cases	Cervical pap smear 10-5 cases
Physical examinations and Leopold manover 5 cases	Identify contraindications to vaccination	Read the pap smear answer and interpret it 2 cases
Fetal heart rate control and maternal vital signs 5 cases	Diagnosis and correct implementation of the difference between the dose and type of vaccine in children and adults	Observe 1 family planning consultation
Request for routine pregnancy tests 5 cases	**Child care department under 5 years:**	Do other consultations 2 cases
Educating the mother about self-care in various subjects: nutrition, sleep, rest and personal health and sexual relations, danger signs, pregnancy exercises and ... or postpartum education 2 cases	File formation for new clients 3 cases	Providing a variety of appropriate family planning methods to clients, including oral contraception pills, condoms, ampoules, IUDs, etc., each of at least 5 cases by performing examinations and requesting the necessary tests in each case.
Conducting group training for pregnant mothers 1-2 cases related to pregnancy and postpartum training	Weighing and measuring the height and head circumference of children correctly 10 cases	Inserting IUD 4-2 cases
Attention and examination about oral and teeth health of pregnant women and referral to the dentist in necessary cases 2 cases	Draw the growth curve correctly on a special card for 10 cases	Removing IUD one case
Guidance on tetanus vaccination 2 cases	Planning visitation intervals for growth monitoring for 10 children	Individual or group training and management of family planning classes at least one case
Breast examination and check it to prepare for breastfeeding 1 case	Diagnosing deviations from proper growth and following up the cause by conducting an interview with the mother and giving the necessary recommendations and possibly the necessary referral to a doctor in 2 cases	Prepare an educational pamphlet, booklet or poster in family planning 1 case
Screening high-risk mothers and	Teaching proper breastfeeding to	**Vaccination department:**

referral to a specialist doctor or hospital 1-2 cases	the mother 3 cases	
Request for ultrasound 1-2 cases	Complementary nutrition education 2 cases up to one year old 2 cases up to two years old	Use of cold chain in the use of vaccines
Diagnosis of high-risk pregnancies, risk training, referral h cases and follow-up	Training on bottle-feeding in 1 case	Applying aseptic principles when vaccinating
Planning for reference intervals in 5 cases	Teaching proper nutrition to children over 2 years old	Using the correct method of prescribing and injecting different types of vaccines
Participate in questions and answers and study theoretical topics		

Main course references:

1. Social Prevention Medicine Textbook, Park, John Edret. Last Edition.
2. Methods and techniques of counseling, Shafi Abadi, Abdullah. The latest edition.
3. Principles of Interpersonal Skills, Ministry of Health and Medical Education,
4. Health Education, Ramachandran, L. The latest edition
5. Public Health, Razavi et al. (Latest edition)
6. Dr. Mohseni's communication book, latest edition
7. Interpersonal Communication Skills in Reproductive Health and Family Planning - United Nations Population Fund Country Support Group, IEC Center Group Translation, Ministry of Health - Population Information and Training Center, Population and Family Planning -
8. Basic Concepts and Specialized Topics in Counseling, Goldard, David, translated by Hosseinian, Simin - latest edition
9. Communication for Health, Hubble, John - in collaboration with the WHO Representative Office
10. Changing the Behaviors of Children and Adolescents, Cromboltz, John Dee, Cromboltz, Helen, latest edition
11. Resources related to pregnancy and childbirth courses and gynecological diseases, latest edition
12. Resources related to health courses 1, 2 and 3 and principles of nutrition and nutrition therapy for mothers and children, latest edition
13. Social Prevention Medicine Textbook, Park, John Edret. The latest edition.
14. Integrated care of a healthy child (especially non-physician) Ministry of Health, Deputy of Health, Family Health Office, Children Department
15. Integrated care of pediatric diseases (especially non-physicians), Ministry of Health, Deputy of Health, Family Health Office, Children's Office 2007
16. Two volumes of guide to providing family planning services (first and second level) - Ministry of Health, Deputy Minister of Health, Family Health Office and Population
17. Description of services of health team and family doctor, Ministry of Health, Health Programs Management Office, Health Programs Review Committee of Network Development Center
18. AEFI Survillance, World Health Organization, Translation: Ministry of Health, Deputy Director of Health

19. Integrated Maternal Health Care (Outpatient Services Guide) - Ministry of Health, Family and Population Health Office, Maternal Health Office
20. National Guide to Performing Natural Childbirth and Providing Non-Drug Methods for Reducing Labor Pain, Ministry of Health, Family and Population Health Office, Maternal Health Department
21. National Guide to Providing Midwifery and Maternity Services, Mother-Friendly Hospitals - Ministry of Health, Family and Population Health Office, Maternal Health Department
22. Kangaroo Care, Luzington Hu, S, Glant, SK, latest edition
23. Hug Care (Kangaroo), Parental Care Guide for Premature infants, Ministry of Health, Family and Population Health Office, Neonatal Health Office
24. WHO and UNICEF (last edition), support and promotion of breast feeding in child-friendly hospitals, Ministry of Health, Department of Child Health
25. National Maternal Death Care System, Ministry of Health, Deputy Minister of Health, Family and Population Health Office, Maternal Health Department
26. The latest protocols of the Ministry of Health regarding reproductive health, mother and child and family planning and vulnerable groups, nutrition and mental health.
27. The latest health indicators and statistics published about Iran and other countries of the world by the Ministry of Health and the World Health Organization and other international organizations such as UNICEF, International Children's Fund, and Population Fund International, UNESCO and...
28. The latest demographic statistics published by the Statistics Organization 19. Authentic demographic books as well as books related to school health
29. Authentic English and Persian books on family planning such as Spiroff Family Planning
30. Other reliable up-to-date references

Student evaluation method in different areas:

Active presence in the internship, completing related tasks of the patient, completing assigned tasks, participate in the final exam

Course Code: 49

Course Name: Principles of Psychiatry in Midwifery

Prerequisite or concurrent: General, Woman and Family Psychology

Number of credits: 1 credit

Credit type: theoretical

General purpose of the course:

-Familiarity with the definition and nature and applications of psychiatry

-Familiarity with common types of mental disorders

-Familiarity with psychological changes during a woman's life

-Familiarity with mental disorders during a woman's life, especially in the reproductive years

-Familiarity with different types of attitudes toward mental disorders and their referral

-Dealing with pregnant women who have mental health problems

- Familiarity with the mental problems of infants and children

Course description:

By passing this course, students will become familiar with psychiatry and its application in identifying mental disorders, especially in different periods from before puberty to menopause, and infants' psychological problems, and their attitudes and referrals.

Outline: 17 hours):

1- Mental disorders including:

Cognitive-Mood -Diagnostic-Anxiety-Physicalization-Psychotic-Neurotic-Eating and Sleeping and Excretion-Sexual-Adaptation and Post-Traumatic Disorders with Emphasis on Sexual Violence, Domestic Violence, Especially Violence Against Women

2- Changes and mental disorders before and during menstruation, puberty, post-marriage, pregnancy, abortion, stillbirth, postpartum, lactation, infertility, menopause and grief and the points faced by them.

3- Infants' mental problems include: mental, linguistic and motor retardation, developmental disorders, hyperactivity, tic, eating, sleeping, defecation disorders and how to deal with them

4- General acquaintance with how to deal with mental disorders and referral cases

Main course references:

1. Sadock, B.J. & Sadock, V.A. (the last edition). Comprehensive Textbook of Psychiatry. Willlams & Wilins: Lippincott.

2. American Psychiatric Association. (the last edition). Diagnostic and Statistical Manual of Mental Disorders

3. 10 Nusbaum M & Rosenfeld JA, Sexual health across the lifestyle, Cambridge (last edition)

4. 11 Blackburn M, Sexuality & disability, Butterworth Heinemann (last edition) Ancis JR, Jongsma AE, The complete womens psychotherapy treatment planner, Wiley (last edition) Zayfert C & Black Becker C, Cognitive behavioral therapy for PTSD (last edition)

Student evaluation method in different areas: 1- Written exam 2- Participation in class activities

Course Code: 50
Course Name: Sexual Function disorders
Prerequisite or concurrent: Principles of psychiatry in midwifery
Number of credits: 1 credit
Credit type: theoretical

General purpose of the course:
- Familiarity with the characteristics of sexual function and the factors affecting it
- Familiarity with sexual function at different ages and conditions such as pregnancy
- Familiarity with sexual dysfunction
- Familiarity with the method of education and counseling in the field of problems related to sexual behavior

Course description:
During this course, students learn normal and abnormal sexual function in couples and sexual behaviors in childhood, adolescence, pregnancy, old age and in diseases and sexual dysfunction and education and counseling in this field.

Outline: (17 hours):
- Psychological theories related to sexual identity, sexual role and sexual behavior
- Sexology from the perspective of physiology and psychology
- The cycle of natural sexual response in women and men
- Factors affecting sexual response including diseases, drugs, age and family environment
- Sexology in childhood, adolescence, pregnancy, old age and organic diseases
- Sexual dysfunction
- Sexual cycle disorders
- The difference between normal and abnormal sexual cycles
- Sexual interest and arousal disorder in women and its causes
- Causes of genitopelvic pain and penetration disorder
- Sexual dysfunction in men and its effect on women
- Education and counseling in sexual dysfunction
- Paraphilia

Main course references:
1- Diseases of Novak women. Burke, Janan. S, latest edition.
2- Psychiatric Summary Behavioral Sciences of Clinical Psychiatry. Kaplan, Zadok, latest edition
3- Sexual issues and psychosomatic disorders. Kaplan, Zadok, latest edition
4 -Nusbaum M & Rosenfeld JA, Sexual health across the lifestyle, Cambridge (last edition)
5 -Blackburn M, Sexuality & disability, Butterworth -Heinemann (last edition)
6 –Ancis JR, Jongsma AE, The complete womens psychotherapy –treatment planner, Wiley (last edition)
7- Other reliable up-to-date sources to introduce the professor

Student evaluation method in different areas:
1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 51

Course Name: Radiology, Sonology and Electrology in Obstetrics and Gynecology
Prerequisite or concurrent: pregnancy and Delivery 1, 2 and 3 - gynecology and infertility
Number of credits: 1 credit
Credit type: theoretical

General purpose of the course:

1. Familiarity with radiology and radiotherapy
2. Familiarity with sonography and electro logy and physiotherapy exercises

Course description: During this course, students are introduced to the basics of radiology, radiotherapy, electro logy and physiotherapy, and how to use it to diagnose and treat cases of gynecological diseases and obstetric problems, and to diagnose over-fetal birth.

Outline: (17 hours):

Teaching the following topics using anatomical models, slides, ultrasound, radiography, colposcopy and hysteroscopy, film, etc.

1- Basics of radiology and radiotherapy in midwifery (radioactivity, nature and properties and absorption of x-rays)

2- Application of high frequency currents, laser, cryotherapy in obstetrics and midwifery

3-Application of x-ray in obstetrics and gynecology (pelvimetry, fetal presentation) - Hysterosalpingography and application of radiotherapy

4- Familiarity with ultrasound device and patient preparation before performing it - Familiarity with colposcopy and hysteroscopy devices and patient's previous conditions and preparation

5- Ultrasound in the first trimester (diagnosis of viable and non-viable pregnancy, determination of gestational age, multiple pregnancies, placental sampling, etc.)

6- Diagnosis of complications in the first, second and third trimesters of pregnancy (abortion, molar pregnancy, ectopic pregnancy, amniocentesis, Down syndrome, etc.)

7- Diagnosis of fetal abnormalities (head, spine, heart, kidney, etc.)

8- Invasive methods of assessing the health and treatment of the fetus (amniocentesis, biopsy of the chorion blood sampling from the head of fetus and umbilical cord, blood transfusion, surgery, etc.)

9- Evaluation of amniotic fluid volume and its disorders - Biophysical profile - Location and age and placental grading and related disorders of fetal growth (weight determination - macrosomia - growth retardation)

10- Ultrasound in gynecological diseases including: examination of pelvis, fibroids, adenomyosis, ovarian masses, cancer and etc.

11- Radioactive tests for diagnosis

12- Familiarity with cowter and cryotherapy and their use and preparations and patient conditions before and after

14- Familiarity with laser device and its application in midwifery and women

15- Using tennis for dysmenorrhea and urinary incontinence, as well as massage and body movements to relieve pain and exercise during pregnancy and after delivery.

13- Kegel exercise

Main course references:

1- Recommended books by the relevant professor and books related to sonography, radiography, radiotherapy, TENS, physiotherapy and massage, sports, physical exercises, etc.

2 -Obstetric ultrasound Made Esay Norman C Smith MD FRCOG, (last edition)

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course code: 52

Course name: Principles of Management and Its Application in Midwifery
Prerequisite or concurrent: Pregnancy and Delivery 1 and 2
Number of credits: 2 credits
Credit type: theoretical

General purpose of the course:

1- Familiarity with the principles and the management process
2- Applying the principles of management in the administration of education and midwifery services and using various decision-making factors in order to solve the problems in midwifery.

Course description: By passing this course, students will learn the principles and the management process and will be familiar with the application of its principles in the administration of education and midwifery services.

Outline: (34 hours):

- Basics and principles of classical management, new management, behavioral management, goals and stages, management (organizational planning, personnel, supervisory, leadership, budget coordination, decision making, communication, control, monitoring, evaluation and special report).
- Supervision and management according to the roles of supervision, leadership, definition of leader, types of leader, and attributes of a manager (ethical, personality, scientific, merit and efficiency, commitment and responsibility…)
- Leadership and social power, leader-follower relations, leadership roles.
- Motivation, the main factors of motivation, recognition and motivation
- Principles and stages of decision-making, problem-solving process, power and delegation
- Planning according to the needs of mothers, infants and patients, staff of the relevant unit, in-service training (short and long term) supervision training.
- Improvement and continuity of quality and total quality management (TQM)
- Organizational entrepreneurship
-Principles of evaluation in midwifery education and services
- Hospital divisions and the organization of health centers and health services, midwifery training at different levels, the role of management in providing services and midwifery education, administration of maternity wards and obstetrics and gynecology departments.
- Health care laws and regulations (staff employment regulations, job descriptions, hospital laws, midwifery services management and training responsibilities according to the objectives of midwifery services training.
- Organizational Excellence Management (EFQM), Models

Main course references:

1- Management Organization, Authority, Ali Mohammad, latest edition.
2- Principles of Management, Jasbi, Abdullah, latest edition.
3- Application of management skills in nursing services, Ghabeljoo, Manizheh, latest edition
4- Nursing and Midwifery Management, Hervabadi, Shafiqeh, Jam, Akram, latest edition
5- Recognition of hospital, Asefzadeh, Saeed, latest edition

6- Principles of Management and Midwifery Services, Rajabi Nejad, Tahereh, latest edition
7- Supervision in Management and Planning, Training Guide, Wales John, Mandy Joseph, Latest Edition
8- Principles of Management, Tehran: Coltz Herold et al., Center for Public Management, latest edition.
9- General management. Interest, Ali, latest edition.
10- and other reliable up-to-date sources

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 53

Course Name: Gynecology and Infertility

Prerequisite or concurrent: Pregnancy and Delivery 1, 2 and 3, Semiology and Physical Examination

Number of credits: 3 credits

Credit type: theoretical

General purpose of the course:

1- Diagnosis of female health issues and appropriate decision-making in choosing the priority in the implementation of treatments and related care (physical, mental, social)

2- Ability to diagnose, decide and take appropriate action (referral, treatment and care) for lesions, abnormalities and diseases of the reproductive system

3- Recognizing the causes of the reproductive system diseases in women, and methods of prevention, diagnosis, treatment and related care.

4- Recognizing professional responsibilities and limitations and adhering to ethical principles and religious principles when providing services.

Course description: This course consists of reviewing the anatomy of the reproductive system, how to take a gynecologic history, menstrual physiology and related disorders, menopause genital tract disorders, breast, infertility and assisted reproductive technologies.

Outline: (51 hours):

- An overview of the anatomy of the female reproductive system (internal and external)
- Taking gynecologic history, gynecological examinations, and screening and diagnostic methods

Knowledge of menstrual physiology (hypothalamus, pituitary, ovarian dysmenorrhea, P.M.S., etc.)

- Puberty (normal, early and late) and hormonal disorders and related diseases

Menstrual disorders, amenorrhea and abnormal bleeding of the genital tract

Menopause and the pre-menopausal period

Types of screening for common gynecological cancers and vaginal infections - STDs and AIDS / HIV infections

Vulvar and vaginal diseases (causes and symptoms of diagnostic and treatment methods, relevant care and preventive methods) infections, benign and malignant diseases.

uteri and cervical cancers (benign and malignant, including causes, symptoms, diagnostic methods, treatment related care, and prevention methods)

- Tubal diseases, infections, abnormalities, tumors and genital tuberculosis
- Ovarian diseases (benign and malignancies), tumors, cysts and polycystic ovary syndrome

Urinary tract disorders, urinary incontinence, vesicovaginal and rectovaginal fistulas

Breast Diseases: Tumors, Cysts, and Infections, Diagnosis, Treatment, and Prevention

Endometriosis and PID

- Chromosomal disorders (various syndromes)
- Infertility:
- A variety of diagnostic, therapeutic and other measures and assistance to infertile couples
- Investigation of the causes of infertility in men and women

Common factors of male and female infertility (sexual issues, poor fertility, incompatibility (immunology)

- Necessary tests to diagnose the causes of infertility
- Factors of infertility in women, cervical, uterine, tubular, ovarian, endometriosis, adrenal factors, and factors related to the thyroid gland and endocrine examination, hormonal factors in infertility.
- Male infertility factors, semen disorders, varicocele, congenital disorders, endocrine disorders, environmental toxins and drug contacts
orientation to assisted reproductive technologies
- Infertility counseling and psychological issues of infertility couples

Main course references:
1. Spiroff, latest edition
2. Novak gynecological diseases. Burke, Janan. S, latest edition.
3. Kissner's gynecological diseases. Ryan, Kent. The latest edition.
4. Gynecological, Hacker, and Moore Diseases - Latest Edition
5. And other reliable up-to-date sources with the opinion of the professor

Student evaluation method in different areas:
1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 54

Course Name: Gynaecology and Infertility Practicum

Prerequisite or concurrent: gynecological diseases and infertility

Number of credits: 2 credits

Credit type: Internship

The general purpose of the course: 1- Gaining the ability to take a history from the patient and perform clinical examinations in gynecological diseases.

2 the ability to diagnose and treat some gynecological diseases

3- the ability to take the necessary care of the client

4- orientation with the role of midwives as counselors and educators in gynecological diseases and infertility

5- Recognizing the limits and duties of a professional in the field of providing clinical services according to ethical and religious principles

Course description: students learn the ability to take history of clients and perform clinical examinations of women, while getting familiar with gynecological diseases and treatment, they also play their advisory and educational role in meeting the needs of clients.

Outline: (102 hours):

Taking a history and performing clinical examinations in gynecological diseases under the supervision of a midwifery instructor and the relevant professor - getting familiar with how to diagnose gynecological diseases and infertility, how to perform prevention and follow-up measures - Diagnosis and treatment of common genital infections - Prescription - Observing gynecological surgeries In the gynecology and obstetrics operating room - getting familiar with counseling and gynecological diseases treatment and infertility issues - Carrying out the required caring in gynecological surgeries - Performing related services for clients and patients with various gynecological and infertile diseases including diagnosis, care, prescription, treatment, , Follow-up , training and necessary consultations in gynecological clinics and 3 infertility centers and also 3 days in gynecological surgery wards

24 days (4 and half hours a day 15minutes rest) (there is no problem in doing more than what is set by the student)

Preparation of wet smear in 15 cases	Prescribing, treating and prescribing for the above 25 cases	Taking history and performing physical examinations in 55-50 cases
observing and diagnosing a wet smear under a microscope 15 cases	training 25 cases	Observation of genital tract examinations in 2 cases
Perform and interpret Fern test in 2 cases	counseling in 2 cases	Performing genital examinations in 50 cases (including external and internal examinations)
Perform PCT and observe it	Observation of gynecological	Observing breast examination

<table>
<tr><td>under a microscope in 1 case</td><td>surgeries in gynecological operating room 2-3 times a day</td><td>in 2 cases</td></tr>
<tr><td rowspan="3">Observation and assistance in hysterosalpingography, hysteroscopy, colposcopy, laparoscopy, cochlear implantation, dilatation and cervical curettage and endometrium 1 case each</td><td>Observation and follow-up of 3 infertility cases in infertility clinic (one day)</td><td>Breast examination in 10 cases</td></tr>
<tr><td>Observation, examination and follow-up of breast tumors (half or 1 day)</td><td rowspan="2">Placement of speculum in 50 cases</td></tr>
<tr><td>See 25 cases other than service and vaginitis</td></tr>
<tr><td>Preparation of culture from vaginal secretions 1 case</td><td rowspan="8">Taking a history and performing examinations and prescriptions, requesting tests and following up on 25 cases other than services and vaginitis (within the same 50 cases we mentioned earlier) by mentioning the names of the cases so it will be clear for the instructor, has the student has trained which cases? Sexually Transmitted Infections, Urinary Tract Infection, Urinary Incontinence, PID, Mole and GTN, Ectopic Pregnancy, Cancers, Cysts and Ovarian Masses, Myoma, Abnormal Diseases, Dysmenorrhea, PMS, Abnormal Bleeding, Amenorrhea, Infertility(... ,</td><td>Observation of cervical cell smears preparation in 2 cases</td></tr>
<tr><td>Educate the patient in 25 cases in different cases</td><td>Preparation of cervical smear in 15 cases</td></tr>
<tr><td rowspan="2">Familiarity with the diagnosis, management and treatment, care and follow-up of patients admitted to the gynecology department for 2 days (at least 6 different cases)</td><td>interpreting the smear result in 5 cases</td></tr>
<tr><td>Request the necessary tests in 25 cases</td></tr>
<tr><td>Breast examination training to the patient about spermogram test 2 cases</td><td>Reading and interpreting test results in 15 cases</td></tr>
<tr><td>Interpretation of semen analysis test result 1 case</td><td rowspan="2">Diagnosis of cervicitis and vaginitis in 25 cases</td></tr>
<tr><td>Participating in discussions and study theoretical topics</td></tr>
</table>

Main course references:

1. Spirof, latest edition
2. Novak gynecological diseases. Burke, Janan. S, latest edition.
3. Kissner's gynecological diseases. Ryan, Kent. The latest edition.
4. Gynecological, Hacker, and Moore Diseases - Latest Edition
5. And other reliable up-to-date sources with the opinion of the professor

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 55

Course Name: Nutrition in Maternal and Child Diseases

Prerequisite or concurrent: principles of maternal nutrition - pregnancy and childbirth (4) - gynecological diseases and infertility

Number of credits: 1 credit

Credit type: theoretical

General purpose of the course:

1- orientation with different diets in the prevention and treatment of diseases

2- orientation with nutritional disorders in causing diseases, especially during pregnancy and lactation

3- orientation with how to teach proper nutrition to the client in order to prevent and treat malnutrition in mother and child

Course description: During this course, topics related to various diets for the prevention and treatment of diseases, eating disorders and diseases, emphasizing on pregnancy and lactation and proper nutrition.

Outline: (17 hours):

1- The general role of diets in the prevention and treatment of nutritional and non-nutritional diseases

2- Principles of diet and treatment regimens

3- Evaluating the nutritional status of infants and mothers and detecting clinical signs due to malnutrition in mothers and infants

4- Classification of normal hospital regimens and treatment regimens

5 - Overview of the use of food schedule and the form of food substitutes, planning a meal based on serves, calories and food groups needed

6- Interaction between food and medicine

7- Nutrition and infection - nutrition and diarrhea

8- Feeding premature babies

9- Nutrition of pregnant and lactating women with diseases and special conditions:

Surgery - Cardiovascular diseases

Obesity - Kidney diseases

Blood pressure - Pregnancy blood pressure and preeclampsia

Diabetes mellitus - Metabolic diseases

Anemia, general weakness, etc.

Main course references:

1. Medical nutrition and treatment regimens, Copper, Heinrich, latest edition

2. Nutrition during pregnancy, lactation and infancy and childhood. Forouzani, Minoo, latest edition

3. Infant nutrition based on physiological principles, Tehran: Deputy Minister of Research, Ministry of Health, Medical Education,

4. Mohan L.Katbleen – Escott, Sylvia – Krauses food nutrition & diet therapy Printed in the united states of America USA.

5. Principles of Krause feeding, latest edition
6. Improving the growth and nutrition of children, Ministry of Health, Deputy Minister of Health, Office of Community Nutrition
7. National Guide to Nutrition during Pregnancy and Breastfeeding, Ministry of Health, Deputy Minister of Health, Population and Family Health Office, Nutrition Improvement Office
8. Breastfeeding, Esfahani, Mohammad Mehdi, latest edition
9. Integrated care of healthy children (especially non-physicians) Ministry of Health, Department of Children
10. Integrated care of pediatric diseases (especially non-physicians), Ministry of Health, Deputy Minister of Health, Family Health Office, Children's Office

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 56

Course Name: Painlessness, anesthesia and CPR in Midwifery

Prerequisite or concurrent: Pregnancy and Delivery 1 and 2 - Neonatology - Pharmacology 1 and 2

Number of credits: 1 credit

Type of credit: 0.5 theoretical credits - 0.5 practical credits

General purpose of the course:

1- orientation with different methods of regional anesthesia (regional anesthesia) in midwifery and women

2- orientation with complications after regional and general anesthesia

3- orientation with the prevention of complications after anesthesia and related care

4- orientation with CPR of the newborn in the operating room or normal delivery room

5- Awareness of the dangers of using regional anesthesia and general anesthesia and analgesia in the mother and fetus and the necessary prevention and care

Course description: By passing this course, students will be familiar with different methods of local anesthesia and general anesthesia in midwifery and the probable dangers for mother and fetus and learn the necessary care in these cases.

Outline: (26 hours):

A. Theory (9 hours)

1- A review of the anatomy and physiology of the reproductive system with emphasis on its sensory and motor nerves

2- Recognition of the anatomy of the upper respiratory system and its physiology

3- Definition of anesthesia and analgesia (anesthesia and anesthesia or analgesia)

4- recognizing anesthetic drugs and their mechanism, and various gases such as oxygen, halothane, carbon, N2O and the dangers arising from them and necessary precautions

Types of anesthesia: local, pudendal, Para cervical, epidural and spinal, complications and poisoning due to them and possible risks of using anesthetic drugs such as anoxia shock, treatment and related care

6- General anesthesia and possible risks of using different drugs and their effects on mother and fetus and their treatment

7- Recognition of anesthesia devices and intensive care of the patient before anesthesia and (prodrug)

8- Stages of general anesthesia - Necessary care during anesthesia

9- Care after anesthesia or after surgery in the recovery room

10- Choosing the type of anesthesia in different cases, choosing anesthesia in vaginal delivery, forceps, vacuum, cesarean section and obstetric and gynecological surgeries

11- Oxygen therapy during cesarean section in the fetus - CPR of the newborn and CPR of the mother

B- Practical (17 hours)

1- Participating in the neonatal CPR workshop (the practical part is not limited to the model. They should be present in the operating room to observe.

2- Observing and getting familiar with the equipment and facilities and performing anesthesia and regional methods and complications during and after the operation and recovery.

Main course references:

1- Special books on anesthesia, latest edition
2- Williams Midwifery, latest edition

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 57

Course Name: Research Methodology and Design

Prerequisite or concurrent: Pregnancy and Delivery 3- Management and Quality Improvement in Maternal, Child and Reproductive Health (health 5) - Gynecology and Infertility and infertility - Maternal, Child and Reproductive Health (health 4)

Number of credits: 1 credit

Type of credit: 0.5 theoretical credits - 0.5 practical credits

General purpose of the course:

Providing opportunities for students to become familiar with the scientific method of research and writing a preliminary research project.

Course description: This course is designed to acquaint students with midwifery research and how to choose a topic as a research topic and how to prepare and write a research plan.

Outline: (26 hours):

A. Theory (9 hours)

1- orientation with research (importance of research - types of research)
2- How to choose the title of the research
3- A review of the performed
studies
4- Objectives and hypotheses
5- Research community and sample - research environment
6- Variables
7- Method of data collection
8- Data collection tool - validity and reliability of the tool
9- Data analysis
10- Interpretation of findings, conclusion, application of research results and its report
11- Ethical principles in research

B- Practical (17 hours)

Main references of the course: All books on research methods in health sciences or midwifery (latest edition and valid up-to-date sources)

Student evaluation method in different areas:

Doing homework - Presenting a research project at the end of the class individually or in groups (3-4 people)

Course Code: 58

Course Name: Medical Information Systems (Information Technology in Midwifery)
No prerequisite or concurrent
Number of credits: 1 credit
Type of credit: 0.5 theoretical credit - 0.5 practical credit

General Purposes of the Course: At the end of this course students will be able to:

Define the concepts of information technology in Medical Informatics.
Getting familiar with communication and information concepts.
Getting familiar with the information tools of medical sciences, indexes and important databases of medical sciences and use them in practice.
Knowing the characteristics of medical libraries and learn how to use resources.
Describing the classification system of the National Library of Medicine (NLM) and learn how to use the Thesaurus.
Getting familiar with the use of computers in medical sciences, nursing and midwifery.
Learning the basics of working with computers, the Internet, and search engines.
Gaining search skills in print and electronic information sources.
Preparing and recording computer reports and learning its benefits.
Computer training should be reviewed and analyzed.
Reviewing computer science systems of medical and midwifery sciences.
Getting familiar with useful sites and how to use and apply them.

Course description: In this course, students will understand the concepts of information technology in medical sciences, infrastructure, applications and challenges, as well as the characteristics of medical libraries and the classification of resources and methods of using medical libraries, information tools, databases and medical databases. Nursing and midwifery will be introduced and practiced in print and electronic form, access to and provision of resources, reporting and training through computers, computer information systems and useful sites.

Outline: (26 hours):

Concepts of information technology in medical sciences such as its definition, history, infrastructure, applications and challenges
Different methods of communication through the Internet, types of simultaneous and asynchronous communication and definition of information concepts
Introducing medical science information tools, indexes and medical science databases and how to use them
Medical libraries and types of resource classification, how to use resources and midwifery references (in printed and electronic form)
How to use thesaurus and define the NLM system in the library.
Applied aspects of computer in medical sciences, nursing and midwifery such as facilitating access to resources and using technology
- General work with computer, operating system, word software, PowerPoint and Internet and search engines

General and specialized retrieval and search methods such as searching databases of medical sciences, nursing and midwifery such as medals and signals

How to prepare a computer report; Registration of examinations, procedures and computer reports and its benefits

orientation with different teaching methods through computer and its analysis.

Definition and introduction of various computer information systems of medical and midwifery sciences

Introducing useful sites, applications and how to use them

- Critique of the management of the information system of a hospital

Main course references:

1- How to use medical authorities. Yazdanfar, Simin, latest edition

2- Information retrieval systems. Lancaster, Wilfred - Last Edition

3- Internet for nurses and midwives. Jannati, Yadala - latest edition

4 – Handbook of Medical Informatics, (last edition), Stanford University, MIT publication, http://www.mieur.nl/mihandbook, http://www.mihandbook.stanford.edu/

5 – Handbook of Informatics for Nurses & Health Care Professionals, (last edition), Prentice Hall; (last edition)

- Cumulative Index & Allied Health Literature (last edition) .CINAHLL Information System. 6

- and other reliable up-to-date sources

Student evaluation method in different areas:

Doing homework - Presenting a research project at the end of the class individually or in groups (3-4 people)

Practical exercises (five cases) 40 points and end-of-semester homework (two cases) 60 points

Course Code: 59

Course Name: Growth and Development
Prerequisite or concurrent: Neonatology
Number of credits: 1 credit
Credit type: theoretical

The general purpose of the course: to acquaint students with growth and development in humans from childhood to adulthood.

Course description: This course helps students to get familiar with the natural development of human beings in different stages of life and to have a correct diagnosis of growth and development in the relevant clinical examinations in infants, children and adults.

Outline: (17 hours):

1- Background and factors affecting growth and development: Biology - Environment - Economic, social and cultural context -

Inheritance genetics - sperm coagulation - prenatal development (embryonic period) - embryonic education - birth.

2- Growth and development in newborns: birth and birth examinations-attachment-bounding,

Neonatal reflexes - Developmental and developmental changes in the neonatal period - Family education - Regarding communication

Communicating with the baby and disruptive factors and taking care of the parents and family members in accepting the baby.

3- Growth and development in infants: Perfection and development in physical, social, emotional, psychological, sexual, cognitive dimensions,

Ethics, speech, mental image of body, communication with parents, needs, nutrition, health monitoring and health promotion, accident prevention and vaccination.

4- Developmental development in toddlers: Parents' relationship with toddler, personal adjustment, independence, developmental development from physical, social, emotional, psychological, sexual, cognitive, moral, speech, thinking words, self-image, play, needs, restrictive rules. Control of physical actions - promotion and supervision of health and prevention of accidents.

5- Growth and development in children: family and young child, growth and development in physical, social, emotional, psychological, sexual, cognitive, moral dimensions, speech, thinking, mental image of self, play, needs, dependence toward independence, promotion of health and development.

6- Growth and development in newborns: Newborn and family, growth and development in physical, social, emotional, psychological, sexual, cognitive, moral dimensions, speech, thinking, mental image of self, play, work, needs, promotion

And health monitoring and accident prevention.

7- Growth and development in adolescence: A review of developmental maturity, biological changes in adolescence, changes in social cognition, development in social and emotional dimension, "self" and personality development, mental image of oneself, group communication with peers, relationship with family and parents, development and development Psychological and sexual, spiritual

development, language and speech, health promotion and supervision, accident prevention and education
Sexual issues.
8- Growth and development in youth: physiological concepts, appearance and personality, theories proposed in youth,
Gender, nutrition, rest and sleep, work, leisure, psychosocial concepts, theory of evolution, cognitive evolution, family planning, opposite sex, love and marriage, pregnancy and parental role, lifestyle, common health and physical illnesses, and emotional issues and marriage issues.
9- Development in middle-aged person: development and interaction in family, relationship with children, relationship with spouse, relationship with parents and relatives, physiological concepts, hormonal changes, metabolic changes, emotional changes,
Nutritional needs, need for rest and exercise, lifestyle, promotion and health monitoring, common diseases, psychological and social concepts, cognitive processes of evolution, work-leisure, emotional development, mental image of oneself, crisis in middle-aged life, menopause and menopause.
10- Changes in the elderly: society's attitude towards the elderly, theories, developmental development, physiological changes, physical health and common diseases, changes in the mental dimension, mental development, adaptation mechanisms, change in mental image, cognitive and social changes, cognitive and structural changes, change Necessary welfare and social.
11- Death (the last stage of evolution in the world): Concepts of the evolution of death, the concept of death from the perspective of children, adolescents and adults, the emotional behavior of the person facing death, awareness of death, the stages of reaction to imminent death, grief over the loss of loved ones, children and spouse, the role of the midwife in these cases, the necessary interventions and helping the person and family and helping the dying person.

Main course references:

1) Human growth and development - Arzomanians, Sonia - latest edition
2 - Bellman M. Peile E. The normal child - Churchill Livingston - (last edition)
3- Neeraja KP. Text book of growth and development for nursing students –Jaypee - (last edition)
4 – Thies KM. Travers JF. Hand book of Human development for health care professionals –Jones and Bartlett - (last edition)
5 – Beaver M. Brester J. Jones P. Neaum S. Tallack J. Early years care and education – Nelson Thornes - (last edition)
6 – Beaver M. Brester J. Jones P. Neaum S. Tallack J.Babies and yong children – certification in child care and education - Nelson Thornes - (last edition)
7 – Crain W. Theories of education concepts and applications (last edition). Prentice Hall – (last edition)
8 - Buckly B. Children communication skills from birth to five years - Routledges - (last edition)
9 Pressley M. Mc Cormick CB. Child and adolescent development for educators – Guilford S. (last edition)
10) and other reliable up-to-date sources

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the midterm exam 4- Participation in the final exams

Course Code: 60

Course Name: Preparing for Childbirth and Physiological Delivery

Prerequisite or Concurrent: Pregnancy and Delivery 1 and 2 (Prerequisite) - Pregnancy and Delivery 3 (Prerequisite or Simultaneous)

Number of credits: 2 credits

Type of credit: 1.5 theoretical credits - 0.5 practical credits

General purpose of the course:

1- orientation with education during pregnancy

2- orientation with non-pharmacological techniques to deal with labor pain

3- orientation with methods of preparation for childbirth

4- orientation with childbirth planning

5- orientation with preparing other family members

Course description: This course helps students to get familiar with the necessary theoretical topics in practice with the necessary training for pregnancy and then for the mother, spouse and family and learn their application in practice.

Outline (43 hours):

A. Theory (26 hours)

Adaptation to pregnancy: Acceptance of pregnancy - Communication with the developing fetus - Adaptation and acceptance of parental role - Adaptation of father

Pregnancy education: Preparation classes for childbirth - Benefits and goals - Classes - Educational materials - Basic components of prenatal education programs - Content of classes - Number of sessions - Time and intervals of classes - Teaching method - Types of classes - Choice of type and environment of childbirth and visit the place

- Mechanism of the labor pain - Pain theories - Valve control and its new theory

- Non-pharmacological techniques to deal with labor pain: relaxation - benefits of relaxation - relaxation techniques - breathing techniques in different stages of labor - hypnosis - aromatherapy - massage - acupressure - T Herbal medicine - change of position and correction of the situation

Methods of preparation for childbirth: Dick Reed method - Lamaz method - Bradley method - Kitzinger method - Labour method - Comparison of methods of preparation for childbirth and their commonalities

- Planning for delivery: Objectives of planning for delivery - Choosing the place of delivery - Spouse participation - Labor, delivery and postpartum administration

- Accompanying role of the class to prepare the spouse - Prepare other children, grandmothers and grandfathers - Use of doula

- Physiological delivery - Relaxation and breathing techniques (theoretical / practical) - Perineal changes in pregnancy (theoretical / practical) - Different positions of delivery - Correction of labor in labor and removal of disorders - Physical exercises in pregnancy - Rehabilitation training - Training after training adults

- Group dynamics - Mind management
- Practical administration of postpartum training classes for mother care and care of infants and toddlers, including 8 sessions

B- Practical (17 hours): Performing activities and learning skills taught in a practical and workshop manner regarding positions during labor and delivery, posture correction, sports and physical exercises during pregnancy and after delivery and practical management of the class

Main course references:

Midwifery and Maternity books and references of the Ministry of Health and other reliable up-to-date sources (latest edition) and related films

Complementary Therapies for pregnancy and child birth - D.Tiran, S.Mack

Student evaluation method in different areas:

1- Active presence in the class 2- completing and submitting assignments 3- Participation in the final exams

Course code: 61

Course name: Implementation of a professional problem-solving plan or research article in midwifery

Prerequisite or concurrent: pregnancy and Delivery (3), health (4 and 5), gynecology and infertility

Number of credits: 1 credit

Credit type: practical

General Purposes of the Course: Familiarity with how to formulate and carry out a project to solve work and research problems or to write a scientific article or a book

Course description:

This course helps students prepare themselves to meet their needs and solve environmental and professional problems independently using available resources and facilities.

Outline: (34 hours):

1) The stages of a work and research project, including reviewing and evaluating the problem (individual, society, family and environment, and organizations and services), design and planning, implementation and intervention, evaluation and reporting in full

2) Complete the various stages of translating or compiling an article or book, including choosing a subject, reviewing texts, collecting material, organizing, and content, and final writing with reference writing, in full.

Main course references:

The same references of theoretical courses depend on the topic chosen for the project, as well as any other source that the professor deems necessary or suggests.

Student evaluation methods in different areas:

Step-by-step presentation of practical assignments and final presentation of the complete project

Each project can be done by 1-to 5 students depending on the professor's workload. The amount of assignments for each student is at least 50 pages. The faculty is allowed to guide a maximum of 4 to 5 students.

Course Code: 62

Course Name: Theories and Models of Midwifery and Health
Prerequisite or concurrent: Pregnancy and Delivery 1, 2 and 3
Number of credits: 1 credit
Credit type: theoretical

General Course Purposes:

Familiarity of students with various models of care delivery in midwifery that form the scientific basis of midwifery education, care, and treatment.

Course Description: Each science has its own discipline for the development and performance of scientific models. Midwifery as a human profession has provided relevant care models in this field and has made significant progress in this regard.

Outline (17 hours):

- Overview of the history of midwifery in relation to presenting theories and models of providing care derived from them.

Midwifery discipline and its structure: Midwifery is a health-oriented discipline.

- Conceptual models (constituent elements of the model, development of conceptual models, classification of midwifery models) and the difference between conceptual and theoretical models.

Knowledge, understanding and its application in midwifery theory: Dermatology theory (clinical, conceptual and empirical theories).

Midwifery: a comprehensive model of care for women during pregnancy and reproductive cycles and, at the same time community-oriented

Philosophy of caring for pregnant women, comprehensiveness of culture and place, comprehensiveness of women's health needs from home to hospital, midwifery emergencies, client pressure to change midwifery, development of professional organizations, midwifery integration in the delivery

Health care for women, especially pregnant women and.. .

Types of models used in midwifery:

Reasoning and decision-making model

- Quality assurance model from a community-oriented midwifery perspective

Evidence-based treatment model

Midwifery coordination model in care management

- Inter-group midwifery cooperation model

Family evaluation model

Self-care model

Some health models

Main course references:

One – Baillie James.Contemporary analytic philosophy. (Last edition). Upper Saddle River. Newjersy. Prentice-Hall. (Last edition)

2- Decherneg Pregler. Women's health principles and clinical practice. (Last edition)

3 - Breslin Eileen.T. Womens, health nursing. (Last edition)
4 - Page Lesley Ann. The new midwifery. (Last edition)
5- Lium Carol. Health promotion. (Last edition)
6- Sherblom Matteson Pegge. Women's Health during the childbearing years. (Last edition)
7 - Symonds Anthem.The midwifery and society. (Last edition)
8 - Arnold Joan. Health promotion. (Last edition)
9 - Henderson Christin. Essential midwifery. (Last edition)
10 - Tomy Ann Marriner. Nursing theorists and their work. (Last edition)
11 - Walsh V. Linda. Midwifery community-based care during the childbearing year. (Last edition)
12 - Frith Lucy. Ethics and midwifery. BFM (last edition)
13- Principles and philosophy of education. Shariatmadari, Ali. The latest edition
14. Mills Midwifery Textbook. The latest edition
15- Theories of nursing, Dehghan Nairi, and Jalalinia. The latest edition
And other reliable, up-to-date sources

Student evaluation methods in different areas:

1- Active presence in class 2- completing and submitting assignments 3- Participation in the final exams

Course Code: 63

Course Name: Sociology and Social Pathology of Women

Prerequisite or concurrent: General, Women and Family Psychology - Pregnancy and Delivery 1 & 2

Number of credits: 1 credit

Credit type: theoretical

General-purpose of the course:

Informing students about the scientific methods of dealing with social phenomena and creating the necessary intellectual background in order to recognize and analyze the social issues of clients, especially women, and general knowledge about the set of conditions in which people are born socially—also, applying the principles of proper communication for the effectiveness of care and treatment and the possibility of correcting and changing the appropriate behavior in clients according to their culture and sociological characteristics. Finally, familiarity with the social harms to women and other family members inside and outside the family.

Course Description: This course helps students to provide their training, counseling, and care to clients according to their cultural and sociological characteristics and with the help of practical communication principles to provide their services. They can also offer services to family members, especially women with social ills.

Outline (17 hours):

- Thematic realm in the field of sociology
- Culture, society, and personality
- Social group

Ethnicities and cultural and sociological differences of individuals and their observance in the provision of services

- Recognition of social organizations
- Socio-cultural dimensions of health and social factors affecting health (SDH)
- Socialization
- Social relations and their need and role in society and cultural system
- Principles of communication, especially in communicating with people with social disabilities
- Social harm to women, children, and family members inside and outside the family

Violence and abuse against women and other family members inside and outside the family

- Social deviations (Overview of several significant issues: poverty - crime - suicide - addiction - alcoholism - inappropriate marriage - moral deviations)

Primary references of the course: books related to communication as well as sociology in medicine and health and social pathology about women and family (latest edition, valid and up to date)

Student evaluation methods in different areas:

1- Active presence in class 2- completing and submitting assignments 3- Participation in the final exams

Course Code: 64

Course Name: Evidence-Based Midwifery

Prerequisite or concurrent: Biostatistics, principles of epidemiology and disease control (health 2), medical information systems (information technology in midwifery)

Number of credits: 1 credit

Type of credit: 0.5 theoretical credits - 0.5 practical credits

General purpose of the course:

Familiarity with evidence-based practice, policies, regulations, and methods of using statistics and research

Enabling students to use evidence, evaluate it, and analyze the limitations and benefits of any research

- Scientific and practical application of this method in solving problems and creating an individual approach to each patient and problem

Course Description: This course helps students to use the latest available scientific information correctly in dealing with evidence-based solutions for each patient.

Outline (26 hours):

A- Theory (9 hours):

- Introduction of evidence-based practice method: Familiarity with this method, how to use this method, the process of development and organization of evidence-based method, and the introduction of a specific approach of the medical team to each patient
- How to make a question based on the patient's problem, familiarity with the medical team's motivations in solving the patient's problems individually, familiarity with designing an appropriate question of the patient's problems, group, or community, compiling four important parts in organizing the question: a) patient's problem B) interaction (cause, prognosis, and treatment), c) comparison of interventions in patient's condition and d) factors affecting the outcome of interactions in patient's condition
- The quality of intervention of organizations involved in the evidence-based practice
- Review the research to answer the questions, identify the sources used for the research, get familiar with the design of the search program for articles, get familiar with determining the appropriate keywords for the search, learn how to organize the findings, and focus the results on answering the question

Evaluation of evidence regarding the usefulness of interventions, the ability to evaluate the quality of research, including sensitivity, specificity of tests, important statistical relationships, sample size, reduction of absolute risk, the sample size for a clinical trial, relative risk, and confidence interval

- Appropriateness of the type of research with the desired question, review or familiarity with the types of research methods, evaluation of each in relation to the desired question, familiarity with systematic review and meta-analysis, familiarity with Internet resources and medical libraries
- Evaluate the value of each research, the ability to determine the credibility or trust, the appropriateness of the measurement tool with the intended purpose, how to eliminate confounding factors, and the quality of follow-up of the subjects

Proposed instructions for the patient's problem based on evidence, the ability to formulate instructions according to the types of research used, and recognizing specific issues in each problem.

B- Practical (17 hours):

- Selecting a midwife patient, asking a question, searching for and presenting a solution, and finally comparing the student's solution with the usual interventions and preparing a practical clinical guide

Main course references:

1- Valid, up-to-date sources determined by the professor

2- Using relevant internet sites such as:

http://www.emro.who.int/rpc/pdf/healthresearchers_guide.pdf PDF]

An Introduction to Evidence-Based Medicine

www.usc.edu/.../education/clerkship/evidence_based/pdf/An_Introduction_to_Evidence ـــــ Based_Medicine.pdf

Course Code: 65

Course Name: Complementary and Alternative Medicine

Prerequisite or concurrent: Pregnancy and Delivery 1, 2, 3, and 4 and their practicumps - Gynecology and infertility - Gynecology and infertility internship

Number of credits: 1 credit

Credit type: theoretical

General-purpose of the course:

Familiarity of students with various methods and complementary and conventional alternative treatments in providing midwifery services and using them in clients

Course description:

This course helps students to learn about complementary therapies and their alternative uses in midwifery.

Outline: (17 hours)

History of complementary and alternative medicine and familiarity with the various methods that are currently used to provide modern health services.

How these methods are included in modern midwifery services and care (human integration, integration of care, research in these methods, training and special courses in these methods, disciplines that use these treatments, responsibilities and related requirements in using these methods, related laws, related laws). And coordination with other relevant specialists in the application of these methods, giving knowledge and obtaining the consent of clients, policies and policy-making, evaluations and audits, associations, and specialized centers related to modern sciences in the field of alternative medicine.

Familiarity with a variety of common methods in pregnancy and childbirth and midwifery in mother, child Weight:

Homeopathy

Osteopathy

Chiropractic

Acupuncture

Herbal medicine

Massage and aromatherapy

Reflexology

Acupressure (acupressure or shiatsu)

Hypnosis

Hydrotherapy

- Calming and relaxation and mental imagery of and ...

Other conventional methods of yoga, meditation, etc.

Heat therapy and cold therapy

Using the above therapies to relieve physical, mental, and emotional stress

Main course references:

1 - Tiran D.Mack S. Complementary Therapies for pregnancy and childbirth (last edition) Tindal Bailliere

2- Valid, up-to-date sources determined by the professor

Student evaluation methods in different areas:

Relevant homework and final exam

Course Code: 66

Course Name: Complementary and Alternative Medicine Practicum/Internship
Prerequisite or concurrent: Complementary and alternative Medicine in midwifery (theoretical)
Number of credits: 1 credit
Credit type: apprenticeship

General Purpose of the course: Familiarity of students with various methods and complementary and conventional alternative therapies in providing midwifery services and their application to clients

Course Description: This course helps students to become familiar with complementary therapies and their alternative applications in midwifery.

Outline: (51 hours)

Practical acquaintance and application of various conventional methods in pregnancy, childbirth, and midwifery in mother, child weight during the internship in the hospital, including:

Homeopathy
Osteopathy
Chiropractic
Acupuncture
Herbal medicine
Massage and aromatherapy
Reflexology
Acupressure (acupressure or shiatsu)
Hypnosis
Hydrotherapy
- Calming and relaxation and mental imagery and ...
Other conventional methods of yoga, meditation, etc.

Heat therapy and cold therapy
Use of the above treatments to relieve physical, mental, and emotional stress
Note: At least five methods should be taught in maternity, prenatal, and possibly gynecological internships.

Main course references:

1 – Tiran D.Mack S. Complementary Therapies for pregnancy and childbirth (last edition) Bailliere Tindal
2- Other Valid, up-to-date sources determined by the professor

Student evaluation method in different areas: Relevant assignments and final exam

Course Code: 67

Course Name: Traditional and Herbal Medicine in Midwifery

Prerequisite or concurrent: General, Woman and Family Psychology – Health 2 -Embryology – Genetics - Pregnancy and Delivery 1, 2, 3, and 4 and their practicums, gynecology and infertility and its practicum

Number of credits: 1 credit

Credit type: theoretical

General Purpose of the course: Familiarity with traditional medicine and medicinal plants and their use in obstetrics

Course description: This course helps students to get familiar with traditional medicine and how to use the effects of plants in solving problems related to patients and clients in Dermatology in addition to modern medicine.

Outline: (17 hours):

Introduction to the history of traditional medicine and midwifery in Iran and the world:

The emergence of medicine in different nations, the contribution of different nations in the development of medicine, major schools of ancient medicine, the flourishing of medicine in Islamic civilization with emphasis on midwifery, Iranian traditional medicine schools at home and abroad with an emphasis on midwifery and women

Persian, Arabic, and English medical terms with emphasis on gynecological and obstetric diseases:

Terms related to the description of the duties of members and diseases, etc.

Basics and natural affairs of Midwifery:

Theoretical and practical wisdom, sensations and position of medicine and midwifery in this classification, natural affairs, causes and reasons, and symptoms in this classification, natural affairs and their importance in traditional and midwifery medicine

Hygiene measures and principles of prevention in women and midwifery:

Nutrition and food control on the acquisition of temperament quality, eating habits, cooking inconsistencies; Preparation and maintenance of food, movement, and stillness of the body, bathing management, retention and vomiting management, sexual intimacy management, management of pregnant and lactating women and children, management of back diseases, management of youth, middle-aged and elderly.

Causes, reasons, and symptoms of dermatology:

Definition of health and disease, dysfunction and its types, four-time stages of the disease, essential set, causes of the disease with emphasis on gynecological diseases and obstetric problems

Familiarity with the principles of work and ethics in traditional medicine

Familiarity with the view of traditional medicine toward humans and the causes and symptoms of diseases

Dermatological and Obstetric Components

Principles and foundations of treatment and major diseases of obstetrics and gynecology:

Natural therapies (nutrition, austerity, ...), surgical treatments, cupping, interest, complement, algebra, relevance, purification and ...

Familiarity with the uses, effects, side effects, advantages, and disadvantages of traditional medicine as well as medicinal plants and how to prescribe them, especially in the following cases:
- Infections of women
- Diseases of the reproductive system, bladder, anus, and sexual function
- Regulation of hormones
- Treatment of cancers, especially gynecological cancers
- To relieve pain and relieve fever, and cough
- To solve specific problems during pregnancy
- For breastfeeding and postpartum problems
- For special disorders of infants and toddlers
- For skin infections such as fungus and ...
- To soothe and calm the nerves
- To strengthen strength and blood formation and contains special vitamins
- For gastrointestinal, heart, blood pressure and ...

Note: In case of lack of hours, the hours can be increased up to 100% with the opinion of the midwifery training group.

Main course references:

1- History of medicine in Iran, history of medicine, (late Dr. Najmabadi, Cyril Algood), Ayoun Al-Anba, history of the wise, latest edition

2- Summary of Al-Hikmah, Bahr al-Jawahar, Qamoos al-Qunun, latest edition

3- Khorazmshahi collection (humiliation of the late Seyyed Jalal Mostafavi), last edition

4- Explanation of the reasons and the signs of Nafis bin Awad, the last edition

5- Law, last edition

6- Al-Hawi, Al-Mansouri, last edition

7- The benefits of food and the removal of harmful substances, the last edition

7- The benefits of food and repelling harms, the latest edition

And other books on traditional medicine and complementary therapies valid, according to the professor

Student evaluation methods in different areas:

Active attendance in class – completing homework - evaluation at the end of the semester

Course Code: 68

Course Name: Reproductive Biology

Prerequisite or concurrent: Physiology 1 and 2 - Embryology - Pregnancy and Delivery 1

Number of credits: 1 credit

Credit type: theoretical

The general aim of the course: to get familiar with the biology of reproduction in the context of human biology. This is achieved by recognizing the structure and function of the male and female reproductive systems, gametogenesis and fetal development, and maternal adaptation during pregnancy. Emphasis is placed on hormonal control of reproduction and this is the basis for understanding contraceptives, infertility, and current reproductive techniques.

Course description: In this course, the student will be introduced in detail to the topics related to human and male reproduction and how the reproductive system works in this field and its importance.

Outline (17 hours):

1- General biology: (biological rhythms, how the main hormones of male and female function, characteristics of hormonal function including secretion pattern, function of receptors, etc.)

2 - Biology of female reproduction: components of the female reproductive system and the function of each part, changes in the female reproductive system during the hormonal cycle, hormonal control of ovarian function, gametogenesis, embryogenic development of the female reproductive system, and the role of hormones in it with age, changes in function (Puberty, menopause…) and environmental factors that affect the evolution of gonads.

3- Male reproductive biology: components of male reproductive system and function of each part, hormonal control of testicular function, gametogenesis, comparison of gametogenesis in male and female, embryogenic evolution of male reproductive system and role of hormones in changing the structure and function of reproductive system Men in relation to age (puberty, sexual development, old age).

4 - Gamete transfer and fertilization: sperm transfer in the male system and the role of each fluid component, transfer of sperm from the vagina to the fallopian tube, laying and fertilization process (including the role of the acrosome, shingles)

5- Implantation and placenta formation: The process of implantation and decidualization of the endometrium, histological structure of the tissue and changes in the function and structure of the placenta during pregnancy and the function of human placental hormones.

6 - Fetal development: The pattern of normal fetal growth during pregnancy, the use of FL, CRL, weight, and other criteria used to determine the age of development and health of the fetus and the ethical issues of working with the fetus and common fetal abnormalities and factors.

7- Birth and lactation: Hormonal adaptation during pregnancy (including physiological and histological changes), normal delivery process and its hormonal control (role of fetus, placenta, and uterus), histological changes of breast, and the role of various hormonal hormones.

8- Social issues in human reproduction: existing treatments for infertility and social and moral issues Infertility treatments, main causes and social and biological consequences of sexually transmitted diseases.

Main References of the Course: Williamson Pregnancy and Childbirth Spiroff Female Hormones and Other Reliable, up-to-date sources (Latest Edition)

Student evaluation method in different areas: active presence in the class - doing homework - evaluation at the end of the semester

Course Code: 69

Course Name: Health Economics Management

Prerequisite or concurrent: Principles of management and its application in midwifery

Number of credits: 1 credit

Credit type: theoretical

General Purpose of the course: Familiarity with health economics, health and development, economics and markets of health care, allocation of resources for health and health care, and setting priorities in health care.

Course Description: This course helps students in evaluating health services and estimating costs, as well as in management planning for the development and delivery of new services, as well as in identifying service delivery priorities.

Outline: (17 hours):

1- Introduction to health economy (definition of health economics, health, general goals, and equality)

2- Health and development (health and growth, health and health costs)

3- Economy and health care markets (supply and demand, factors affecting demand and balance, intervention and reduction of welfare, full competition and fair distribution of assets)

4- Financing health care (current spending model in developing countries, features of a favorable health financial system)

5- Allocating resources for health and health care

6- Calculating health benefits

7- Financial and economic evaluation of health care projects

8- Determining and adjusting priorities in health care

9- Organizing health services and decentralization of health system and payment systems

10- Measuring and improving efficiency in health care

Main course references:

Health Economics for Developing Countries - Latest Edition

- and other similar sources (latest edition)

Student evaluation methods in different areas:

Active attendance in class - completing homework - evaluation at the end of the semester

Course Code: 70

Course Name: Client and Patient Education

Prerequisite or concurrent: Pregnancy and Delivery (2) - Health 3 and 4

Number of credits: 1 credit

Credit type: theoretical

The general purpose of the course: students will learn the principles of learning, educational process, tools, technology and educational methods, factors affecting education as well as types of education in different diseases and problems and different ages of clients or patients.

Course Description: This course helps students to become familiar with the principles of learning, process, tools, and types of educational methods and to teach them to clients and patients in order to maintain and improve their health and recovery.

Outline: (17 hours):

1- History of patient-client education -Patient-client rights movement -Necessity of patient-client education in maintaining and promoting health and prevention of disease and recurrence of disease-Improvement and adaptation to permanent disorders-Therapist and caregiver duty-Patient-self-care duty and psychology of the patient.

2- Principles and process of learning: types of learning - learning theories - learning in children - learning in adults - principles of learning and effective factors and barriers to learning.

3- The difference between education and learning - The role of the midwife in learning education - Designing the educational program and its different stages (determining the need, setting goals, the educational content of cognitive, attitudinal, and psycho-motor domains, and different levels of learning in each, conditions, tools, resources, evaluation).

4- Types of teaching methods (historical and modern methods): lecture - questions and answers - explanatory - group discussion - role play - play - project - problem solving - consulting - test method - simulation - laboratory skills - brainstorming - case study - workshop Panel - Symposium - Forum (Debate) - Seminar - Conference - Scientific Tour -

5- Teaching skills: the role of appearance - teacher's voice and expression - attention - movement - question - emotional interaction with the learner - teacher behavior - situations arising from the teaching space - environmental factors - educational environment (classroom - clinic - hospital - media - community and ... .

6- Media and teaching aids: Choosing educational tool or media and method of using it - poster - pamphlet - leaflet - folder - brochure - sticker (sticker) - tract - chart - flange graph - announcement - warning - advertisement - photo - image - Divorce - Visualizer - Chart - Map - Blackboard - Whiteboard - Blackboard - Advertising Board (Ordinary and Electronic) - Demonstration Cards - Real Sample and Models - Wallpaper - Notebook - Calendar - Calendar - Booklet - Handbook - Booklet - Newspaper (Press) - Books - Visiting the field - Scientific tour - Audio media - Movies - Videos - Television - Computers - Machines copied.

7- Evaluation: The concept of measurement and evaluation - Definition of measurement and test - Evaluation objectives - Importance and necessity of evaluation - Types of evaluation: diagnostic, formative or stage, and comparative or final

Evaluation of midwifery education - evaluation time - evaluation of clients 'and patients' learning.
8- Assessing the patient's capacity and ability to learn - Motivating the patient's education - Psychological factors in the patient's education and the patient's capacity and ability in terms of individual, personality, self-perception, personal adjustment, etc. - Patient education as part of the treatment process -
Education for patients at different stages and ages of life (before birth or fetus, infancy and infancy, infants, young children and adolescents, adolescents, youth, middle-aged and elderly adults) - Education for parents - Education for families in diseases - Education according to different cultures of patients -
Establish effective communication for recommendations to increase the patient's ability - Participate the patient in education - Pay attention to the patient's level of education and skills - Educate the patient about complementary therapies - and alternatives - Patient and family education in cases of death and leading to death - Ethical issues in patient education and related ethical principles and theories - Conscious consent and related forms - Education to society - Research and its importance in patient education, community family
9- Types of education for patients with various diseases, especially gynecological and obstetric diseases - different stages of life that require special education such as marriage, pregnancy, childbirth, breastfeeding, postpartum, family planning, menopause, infertility, cancer, screening, and aging ....

Main course references:

1- Principles of patient education - Safavi Mahboubeh - Borzoi Tahereh - latest edition
2- Principles of planning for patient education - Siberian Masoumeh - latest edition
3- Learning process and principles of patient education, Asadi Noghabi Ahmad Ali- Zandi Mitra- Nazari Ali Akbar- Last edition
4 - Patient Companion - Esfahani Mohammad Mehdi - Tehran University of Medical Sciences and Health Services - Medical Ethics Research Center
5- Falvo DR. Effective patient education - a guide to increased compliance (last edition). Jones and Bartlett (last edition)
6 - Authors group - Patient teaching reference manual - Springhouse (last edition)
7 – Patient Education for children –teens and parents – (last edition). American Academy of Pediatrics (AAP) (last edition)
- and other reliable sources of the day

Student evaluation method in different areas: homework assignment and final exam

Course Code: 71

Course Name: Nutrition before, during and after pregnancy

Prerequisite or concurrent: principles of mother and child nutrition - Neonatology - Neonatology Practicum

Number of credits: 1 credit

Credit type: theoretical

General Purpose of the course: Familiarity with the importance and application of nutrition in different stages of the fetus, infancy and childhood

Course description: This course helps the student to properly perform the necessary care, nutritional prescriptions and training for the nutrition of pregnant mothers and infants, children and adolescents.

Outline: (17 hours):

- Nutrition around birth and its consequences in infants
- Nutrition before fertilization
- Nutrition in fertilization

Maternal nutrition for intrauterine growth and growth restriction

Pregnancy nutrition and fetal disease hypothesis

Nutrition in high-risk pregnancies

placenta as a feeding unit

- The effect of nutrition on infant development
- Breastfeeding in infants and preterm infants
- Nutrition in premature infants after discharge from the hospital

The effect of nutrition of pregnant adolescent mothers on the baby

The effects of complementary nutrition and artificial nutrition in future diseases of the child

Main course references:

1- Helping breastfeeding mothers - felicity savage king- latest edition

2- Breastfeeding - Scanner Richard C. Translated by niknafas, Pedram - latest edition

3- Genetic effects of pregnancy latest edition

4- Krause - latest edition

5 - Bhatia J. Perinatal nutrition - optimizing infant health and development - Deker (last edition)

6- Lawrence RA. Lawrence RM. Breast feeding – A guide for the medical profession 5th Mosby (last edition)

7 – dare A. O Donovan M. A practical guide to child nutrition (last edition) .Churchill Livingstone (last edition)

8 – Royal college of midwives – Successful breast feeding (last edition) .Churchill Livingston (last edition)

9 - Lang S. Breast feeding special care babies (last edition) Bailliere Tindal (last edition)

10 - Mannel R. MartensPJ. Walker M. International Lactation Counsaltant Association – Core curriculum for lactation consultant practice. (Last edition) .Jones and Bartlett (last edition)

11 – Zigler EE. Lucas A. Moro GE. Nutrition of the very low birth weight infant (Nesthle Workshop serial vol.43 - Lippincott Williams and Wilkins (last edition)
12 – Suskind RM. Tontisiran K. Nutrition, Immunity, and infection - Lippincott Williams and Wilkins (last edition)
- and other reliable sources of the day

Student evaluation method in different areas: homework assignment and final exam

Course Code: 72

Course Name: Promoting Breastfeeding

Prerequisite: Pregnancy and Delivery 1 and 2 - Maternal, child and reproductive health (health 4)

Number of credits: 1 credit

Type of credit: 0.5 theoretical credit - 0.5 practical credit

General Purpose of the course: - Familiarity with child-friendly hospitals as part of the global strategy

Familiarity with the importance of promoting breastfeeding

Familiarity with the necessary measures to promote breastfeeding

Course Description: This course helps students to become theoretically familiar with how to work in child-friendly hospitals and how to promote breastfeeding, and to apply the relevant measures in practice.

Outline (22 hours):

A: Theoretical (9 hours):

1- Child-friendly hospital as a part of the global strategy and related measures
2- Communication skills
3- Promoting breastfeeding during pregnancy
4- Protecting breastfeeding
5- Methods of delivery and breastfeeding
6- How to transfer milk from breast to infant
7- Helping with breastfeeding
8- Methods that help breastfeeding
9- Milk production
10 - Infants with special needs
11- Infants who are not able to breastfeed
12- Conditions of the breast and its tip
13- Concerns related to mothers' health
16- Problems and diseases related to breast milk
17- Using breast milk in various diseases of children
18- Questions of mothers and how to answer them and provide solutions
19- Continuous support for breastfeeding mothers 20- How to set up a child-friendly hospital

B: Practical (17 hours):

1- Observing breastfeeding and helping with breastfeeding and different positions
2- Conversation (education and counseling) with pregnant women and their husbands or other family members
3- Observing milking by hand and feeding with cups

Main references of the course:

1- UNICEF and WHO, translation: Freivar, Khalil-Saedvandian, Susan-Freivar, Maryam-Ministry of Health, Deputy Minister of Health, Population Health Office, Family and Schools
2- Educational guide for pregnant mothers for breastfeeding - Ministry of Health - Population, Family Health Office – Mother milk Nutrition Promotion Office
3 – Breast feeding hand book for physicians – American Academy of Pediatrics & American College of Obstet. & Gyn. - (last edition)

Student evaluation method in different areas: active presence in the class - doing homework - evaluation at the end of the semester

Course Code: 73

Course Name: Midwifery and Reproductive Health in Crises and Disasters

Prerequisite or concurrent: Pregnancy and Delivery 3 and 4 - Health 3 and 4 and 5 – Gynecology and infertility

Number of credits: 1 credit

Credit type: theoretical

General Purpose of the course: Familiarity of students with midwifery and reproductive health issues during crises and natural disasters

Course description: This course helps students to get familiar with the important and major topics of midwifery and reproductive health in times of crises and natural disasters, and to know the priorities and emergencies in these situations.

Outline (17 hours):

- Definition of emergency and critical situation
- The stages of an emergency or a critical situation
- The effects of crises and disasters on health
- Reproductive health standards include: Minimum services required - Sexual violence - Midwifery emergencies - Contraception issues - Comprehensive reproductive health benefits

Psychological issues and their effects on reproductive health issues

- Providing reproductive health services in crises and disasters
- What is reproductive health?
- History of Reproductive Health Services, Especially for Refugees - Reproductive Health Services and Human Rights

Reproductive health emergency services for IDPs and refugees

- Long-term reproductive and sexual health services including:
- Maternal health
- Family planning
- Sexually transmitted diseases
- Sexual and sex-linked violence
- Reproductive and sexual health in adolescents
- Other reproductive and sexual health needs, including: men's participation - traditional and harmful practices of society and ...

Main references of the course: selected by the relevant professor or instructor and also:

- Khalili Gh. Shatti M. Izadi F. Disaster and Repdrodukctive Health - Health Ministry (last edition)

Student evaluation method in different areas: active presence in the class - doing homework - evaluation at the end of the semester

Course Code: 74

Course Name: Midwifery and Reproductive Health in Urban Health

Prerequisite or concurrent: Pregnancy and Delivery 3 and 4 - Health 3 and 4 and 5 - Gynecology and infertility

Number of credits: 1 credit

Credit type: theoretical

General Purpose of the course: Familiarity with midwifery and reproductive health issues in the field of urban health

Course description: This course helps students to get familiar with the important and major topics of midwifery and reproductive health in the field of urban health.

Outline (17 hours):

- Urban health and its importance
- Major issues in urban health
- Reproductive health and urban health
- The role of midwives in reproductive health issues and urban issues
- Reproductive health and various types of urban air pollution, food, water and ....
- Reproductive health and occupational health issues
- Reproductive health and education of citizens
- Reproductive health and the health of the next generation
- Reproductive health and health of women and girls
- Reproductive health and the role of men
- Reproductive health and children and adolescents and the necessary training in this field
- Reproductive health and urban crises and disasters
- Reproductive health and the role of officials, managers and community leaders
- Other issues in the field of reproductive health related to urban health issues

Main references of the course: selected by the teacher or instructor

Student evaluation method in different areas: active presence in the class - doing homework - evaluation at the end of the semester

Course code: 75

Course name: Normal and abnormal pregnancy internship
Prerequisite or concurrent: None
Number of credits: 3 credits
Type of credit: Practicum

General Purpose of the course: Achieving skills in administration and performing prenatal care in natural and high-risk pregnancies

Course description: This course helps the student to acquire the necessary skills in performing prenatal care for normal and abnormal pregnant mothers and to provide the necessary training, advice and prescriptions for them.

Outline: (153 hours):

Performing prenatal care along with requesting tests and prescriptions, trainings and consultations, and referrals and necessary follow-ups in prenatal clinics of Hospitals affiliated Medical sciences Universities 32 days (4.5 hours per day with 15 minutes of rest) (there is no problem in doing more than what is specified)

<table>
<tr><td>Perform 5-10 cases of ultrasound and other fetal health tests and 30 cases of interpretation and guidance according to their results</td><td rowspan="2">Physical examination of various organs of the mother's body and neurological systems in about 80 cases (including conjunctiva, thyroid, heart, lung, breast, leopard, limbs, etc.</td><td rowspan="2">Taking a history and psycho-social and physical evaluation in 60-55 normal pregnant women (without complications) with the necessary training and complete care (approximately 1.3 in the first trimester, 1.3 in the second trimester and 1.3 in the third trimester)</td></tr>
<tr><td>Perform 1-2 cases of NST2-1 case of rollover test and 1-2 cases of indirect coombs</td></tr>
<tr><td rowspan="2"></td><td>Prepare an educational pamphlet or poster (individual or group)</td><td rowspan="5">Get a history and psycho-social evaluation and
Physical and performing examinations and care and requesting tests in 25-30 cases of pregnant women with internal diseases and surgery (2-3 cases of heart disease, 2-3 cases of diabetic pregnancy, 2-3 cases of eclampsia, 2-3 cases of urinary tract infection, 2-3 cases of urinary tract infection, 2-3 cases of urinary tract infection) Hepatitis, etc., 2-3 cases of preterm and term skin, 2-3 cases of negative seizures, 2-3 cases of thyroid disease, 2-3 cases of other diseases such as respiratory, epilepsy, IUGR, etc.</td></tr>
<tr><td>Heart rate hearing with Pinard 20 and Doppler 50</td><td>File and request routine or necessary tests during pregnancy in 40 cases</td></tr>
<tr><td>Interpretation of correct guidance based on test results in 50 cases</td><td>Prescribing licensed drugs during pregnancy in 50 cases and giving 30 cases of education and 3 consultations</td></tr>
<tr><td>Office of Pregnancy Training Classes 3 cases</td><td rowspan="2">Request for 3-3 cases of complete examination and urination in case of emergency and need</td></tr>
<tr><td>Doing pregnancy counseling with a couple 2 cases</td></tr>
<tr><td colspan="3">Participate in questions and answers and study theoretical topics determined by the instructor</td></tr>
</table>

The main references of the course: the same sources of the theoretical courses of pregnancy and childbirth

Student evaluation method in different areas:
- Active student presence
- Performing assigned tasks and duties
-Carrying out care related to the client or patient
- End of course exam

Course Code: 76

Course Name: Normal and abnormal delivery (1) internship
Prerequisite or concurrent: None
Number of credits: 2.5 credits
Type of credit: Practicum of childbirth

General Purpose of the course: Achieving the skills of managing labor delivery and postnatal care in natural and case cases in the maternity wards of teaching hospitals

Course Description: This course helps students to acquire the necessary scientific and practical skills in the management of labor delivery and postpartum care in natural and case cases.

Outline: (255 hours):

Students should be responsible for all care and administration of the delivery service, as well as postpartum care in normal and abnormal cases.

26 days in the morning and evening for 10 hours (1 hour of prayer and lunch) (there is no problem to doing more than what is set by the student)

<table>
<tr><td>Monitoring the condition of the infant immediately after delivery (opening the airway, preventing hypothermia, stimulating breathing to improve and giving Apgar 1 and 5 minutes) 30-30 cases</td><td rowspan="2">Wearing the right gloves and scrub and using the equipment correctly and opening the pack correctly and providing the necessary equipment by applying the correct principles of sterilization
35-30cases</td><td rowspan="2">Note: Half to two thirds of the following should be in cases such as diabetes, preeclampsia, premature rupture of the bladder, decolonization and parvia, post date / post term, cardiac, twin, breech, dead fetus, IUGR, preterm delivery, vacuum, etc. and name of each specific case should be recorded in the summary that the student writes for each individual to later determine if each student has been trained in all cases. How many cases has the student done?</td></tr>
<tr><td>Umbilical cord clamp and physical examination of the baby Vitamin K injection and monitoring of the bracelet and taking the effect of the baby's foot 35-30 cases</td></tr>
<tr><td rowspan="2">Assistance in repairing an episiotomy or rupture of 3 cases with the necessary attention and care before, during and after the repair (about a classmate)</td><td>Proper performance of peripheral and perineal drop 35-30 cases</td><td>Participate in pregnancy and childbirth preparation classes.
Physical examinations and leopolding, vital signs 35-30 cases</td></tr>
<tr><td rowspan="2">Performing correct episiotomy anesthesia 10 cases of podendal anesthesia 1 case and assistance with</td><td rowspan="2">FHR control of at least 130 cases (, enough to control labor) including finding the right place, controlling fetal pulse with maternal pulse, complete 1-minute control, necessary control immediately after contraction, counting</td></tr>
<tr><td>Proper delivery of the placenta, complete examination of 30-30 cases</td></tr>
</table>

	epidural anesthesia 1 case	and recording, and using internal and external monitoring
Manual removal of the placenta and intrauterine examination in the fourth stage 1 case	Diagnosis of the need for episiotomy 10 cases	Vaginal examination: dilatation, effusion, station, possibly position, cervical position, bladder position and to some extent pelvic examination (70-50 times)
Proper disposal of contaminated consumables and proper collection of non-consumable cases in the relevant places after delivery 30-30 cases	Episiotomy repair 10 cases	Necessary examination and decision to hospitalize the fetus in labor 15 cases of non-pharmacological methods to reduce labor pain
Establishing bounding and attachment between the newborn after delivery 35-30 cases	Laceration repair 3 cases	Preparing the hospitalized corner for placement in the labor room (clothing, bed, advising to empty the bladder, taking a vein and connecting the serum if necessary, blood sampling and necessary explanations to the delivery room) 20 cases
Prepare an educational pamphlet or poster (individual or group)		
Establishing maternity comfort condition and performing fourth stage controls (including bleeding control, uterine height and consistency, vital signs, delivery awareness every hour to 1 hour) after delivery and correct registration and reporting it to the instructor / midwife of 30-30 cases.	See 5 other cases he/she has not seen so far.	Complete management and control of labor (including control of heart sound, control of uterine contractions, nutrition, position, reliable communication and necessary training and emotional support of childbirth, vaginal examination, attention to bladder emptying, helping to relieve pain, prescribing necessary medications and necessary medical supplies. To the questions of the child or his companion, etc.) 50-45 cases, each case for at least 3 hours, of which 6-8 cases are induction.
Observation of abortion, curettage and cesarean section and assisting in maternal and neonatal care after 1-2 cases		
Provide complete postpartum education to the mother after labor(including self-care and personal hygiene, bathing, wound care, lucia, nutrition, hygiene in urinary defecation, dangerous signs in maternity, urgent referral, breastfeeding, vaccination, defecation, other feces) Neonatal symptoms, tests for screening for diseases leading to neonatal retardation, sexual intimacy and family planning and relapse, as well as the	Observe and assist in delivery in 5-6 cases	Perform amniotomy with all the necessary conditions 10 cases

possibility of re-pregnancy and the time and place of subsequent visits) in 30-30 cases, 1 case of postpartum counseling		
Discharge of the mother by performing examinations and giving the necessary training during discharge about herself and the baby 4 normal cases and 2-3 cases	Complete delivery (normal and case) 35-30 cases	Diagnosis of delivery time and timely transfer of labor to delivery room 35-30 cases
Participate in questions and answers and study theoretical topics determined by the instructor		

Main course references: The same theoretical course resources as pregnancy and childbirth courses

Student evaluation method in different areas:

Active student attendance - Assignments - Carrying out care related to the patient or client - End of course exam

Course Code: 77

Course Name: Normal and Abnormal Delivery (2) Internship

Prerequisite or concurrent: None

Number of credits: 2.5 credits

Type of credit: Practicum of childbirth

General Purpose of the course: Achieving the skills of managing labor delivery and postnatal care in natural and case cases in the maternity wards of teaching hospitals

Course Description: This course helps students to acquire the necessary scientific and practical skills in the management of labor delivery and postpartum care in natural and case cases.

Outline: (255 hours):

Students should be responsible for all care and administration of the delivery service, as well as postpartum care in natural and abnormal cases.

26 days in the morning and evening for 10 hours (1 hour of prayer and lunch) (there is no problem in doing more than what is set by the student)

<table>
<tr><td>Monitoring the condition of the infant immediately after delivery (opening the airway, preventing hypothermia, stimulating breathing to improve and giving Apgar minutes 1 and 5 minutes) 30-30 cases</td><td rowspan="2">Wearing the right gloves and scrub and using the equipment correctly and opening the pack correctly and providing the necessary equipment by applying the correct principles of sterility
35-30cases</td><td rowspan="2">Note: Half to two thirds of the following should be in cases such as diabetes, preeclampsia, premature rupture of the membranes, placenta previa and abruptio, post term, twin birth, breech, dead fetus, IUGR, preterm delivery, vacuum, etc. and name of each specific case should be recorded in the summary that the student writes for each individual to later determine if each student has been trained in all cases. How many cases has the sudent doe?</td></tr>
<tr><td>Umbilical cord clamp and physical examination of the baby, injection of vitamin K and supervision of the bracelet and taking the effect of the baby's foot 35-30 cases</td></tr>
<tr><td rowspan="2">Assistance in repairing an episiotomy or rupture of 3 cases with the necessary attention and care before, during and after the repair (about a classmate)</td><td>Proper performance of peripheral and perineal drop 35-30 cases</td><td>Getting a history, physical examination of Leopold Getting vital signs 30-30 cases</td></tr>
<tr><td rowspan="2">Performing correct episiotomy anesthesia 10 cases of podendal anesthesia 1 case and assistance with epidural anesthesia 1 case</td><td rowspan="2">FHR control of at least 120 cases (as much as necessary for labor control) including finding the right place, controlling fetal pulse with maternal pulse, full 1-minute control, necessary control immediately after contraction, counting and recording and using internal and external monitoring</td></tr>
<tr><td>Proper delivery of the placenta, complete examination of 30-30 cases</td></tr>
<tr><td>Manual removal of the placenta and</td><td>Diagnosis of the</td><td>Vaginal examination: dilatation,</td></tr>
</table>

intrauterine examination in the fourth stage 1 case	need for episiotomy 10 cases	effusion, station, water bag position, cervical position, bladder position and to some extent pelvic examination (70-50 times)
Proper disposal of contaminated consumables and proper collection of non-consumable cases in the relevant places after delivery 30-30 cases	Episiotomy repair 10 cases	Necessary examination and decision to hospitalize labor in 15 cases
Establishing bounding and attachment between the newborn after delivery 35-30 cases	Rupture repair 3 cases	Preparing the hospitalized mother for the labor (clothing, bed, recommending to empty the bladder, taking blood vessels and serum attachment, if necessary, blood sampling and necessary explanations to the center) 20 cases
Prepare an educational pamphlet or poster (individual or group)		
Establishing maternity comfort condition and performing fourth stage controls (including bleeding control, uterine height and consistency, vital signs, delivery awareness every hour to 1 hour) after delivery and correct registration and reporting it to the instructor / midwife of 30-30 cases.	See 5 other cases he/she has not seen before	Complete management and control of labor (including control of heart sound, control of uterine contractions, nutrition, position, communication, trust, training and emotional support of childbirth, vaginal examination, attention to bladder emptying, pain relief, using various non-pharmacological methods. In the required cases, answering the questions of the mother, etc.) 40-45 cases, each case for at least 3 hours, of which 6-8 cases are induction.
Observing abortion, curettage and cesarean section and assisting in maternal and infant care after 1-2 cases		
Provide complete postpartum education to the postpartum ward (including self-care and personal hygiene, bathing, wound care, lucia, nutrition, hygiene in urinary defecation, danger signs in maternity, urgent referral, breastfeeding, vaccination, defecation, other feces) Neonatal symptoms, tests for screening for diseases leading to neonatal retardation, sexual intimacy and family planning and relapse, as well as the possibility of re-pregnancy and the time and place of subsequent visits) in 30-30 cases, 1 case of postpartum counseling	Observe and assist in delivery in 6-5 cases	Perform amniotomy with all the necessary conditions 5 cases

Discharge of the mother by performing examinations and giving the necessary training during discharge about herself and the baby 4 normal cases and 2-3 cases	Complete delivery (normal and case) 30-35 cases	Diagnosis of delivery time and timely transfer of labor to delivery room 35-30 cases
Participate in questions and answers and study theoretical topics determined by the instructor		

Main references of the course: The same theoretical course resources as pregnancy and childbirth courses

Student evaluation method in different areas:
Active student attendance - Assignments and tasks assigned - Carrying out care related to the client's disease - End of course exam

Course Code: 78

Course Name: Gynecology and Infertility Internship
Prerequisite or concurrent: None
Number of credits: 2 credits
Type of credit: Practicum

The general purpose of the course: to acquire skills in diagnosing gynecological diseases and how to manage and treat them, as well as the necessary training and advice. Also, familiarity with how to diagnose and treat infertility and infertility training and advice.

Course Description: This course helps students to acquire the necessary skills in diagnosing and providing related services regarding gynecological diseases as well as infertility problems and conducting counseling and training related to them.

Outline: (102 hours):

Carrying out relevant services for clients and patients with various gynecological and infertility diseases, including diagnosis, care, treatment, prescription, referral, follow-up and training, and necessary consultations in gynecology clinics and infertility centers of gynecological and inpatient training hospitals.

21 days (5 hours a day with 15 minutes of rest) (it is not forbidden to do more than what is set by the student)

Seeing a wet smear under a microscope detects it in the above 15 cases	instructing in 20 cases	Take a history and perform physical examinations in 60 cases
Perform and interpret Fren test in 2 cases	Perform counseling in 2 cases	Performing genital examinations in 60 cases (including external and internal examinations)
Perform PCT and observe it under a microscope in 1 case	Observation of gynecological surgeries in gynecological operating room 2-3 times a day	Breast examination in 10 cases
Assistance in performing hysterosalpingography, hysteroscopy, colposcopy, laparoscopy, cochlear implant, dilatation and cervical cortex and endometrium, 1 case each	Observation and follow-up of 5 infertility cases in infertility clinic (one day)	Placement of speculum in 60 cases
	Observation, examination and follow-up of breast tumors (half a day or a day)	
Preparation of culture from vaginal secretions 1 case	See 35 cases other than cervicitis and vaginitis	Preparation of cervical smear in 15 cases
Educate the patient in 25 cases in	Taking a history and performing	Reading and

<table>
<tr><td>different cases</td><td rowspan="6">examinations and prescriptions and requesting tests and necessary follow-up in 35 cases other than cervicitis and vaginitis (within the same 60 cases that we mentioned at the beginning) by mentioning the cases, so the cases will be clear for the instructor including sexually transmitted diseases, urinary tract infections, urinary incontinence, PID, mole and GTN, ectopic pregnancy, cancers, cysts and ovarian masses, myomas, breast diseases, dysmenorrhea, PMS, abnormal bleeding, amenorrhea, Infertility, menopausal problems, hirsutism</td><td>interpreting the smear result in 5 cases</td></tr>
<tr><td>Familiarity with how to diagnose, manage and treat, care and follow up patients who are hospitalized in gynecology surgery for 2 days (at least 6 different cases)</td><td>Reading and interpreting test results in 20 cases</td></tr>
<tr><td>Breast examination training to the patient in 3 cases</td><td rowspan="3">Diagnosis of cervicitis and vaginitis in 30 cases</td></tr>
<tr><td>Interpretation of semen analysis test result 1 case</td></tr>
<tr><td>Prepare an educational pamphlet or poster
)Individual or group(</td></tr>
<tr><td>Participate in questions and answers and study theoretical topics</td><td>Preparation of Pap smear, LBC and wet smear in 15 cases</td><td>Prescribe treatment and write a prescription for the above 30 cases</td></tr>
</table>

Main references of the course: The same theoretical course resources

Student evaluation method in different areas:

Active presence of the student - completing homework and assigned tasks - performing care related to the client or patient - end-of-course exam

Course Code: 79

Course Name: Maternal, Child and Reproductive Health and Family Planning Internship
Prerequisite or concurrent: None
Number of credits: 2 credits
Type of credit: Practicum

The general purpose of the course: to acquire skills in providing reproductive health, mother and child and family planning and community health services, which are the main duties of midwives. Also identify problems with these services and provide solutions for them.

Course Description: This course helps midwifery students to perform midwifery services related to reproductive health, mother and child and family planning and health services of the relevant community correctly and with the necessary skills.
Also, it is expected that they can identify the existing problems in providing these services and provide the necessary solutions to solve them.

Outline: (102 hours):

Performing services related to reproductive health, mother and child and family planning, as well as community health services related to the midwifery profession in headquarters and urban health centers, as well as rural and community centers where women attend or study and work along with a problem- solving project.
21 days (5 hours a day with 15 minutes of rest) (it is not forbidden to do more than what is set by the student)

Screening of high-risk mothers and referring them to a specialist doctor or hospital (1-2 cases)	**under 5 Child related care section years:**	**Family planning:**
Request of sonography (2-1 cases)	making the medical record for new clients (3 cases)	Making the medical record for new clients 6 cases
Diagnosis of high-risk pregnancies, client education ,doing special referring and follow-up	Weighing and measuring height and head circumference of children correctly (10 cases)	Physical examination of clients
Planning for visit intervals in 5 cases	Draw the growth curve of child correctly on a special card for 10 cases	Perform cervical smear (4 cases)
Other cases:	Planning visitation intervals for growth monitoring for 10 children	Read the smear answer and interpret it 4 cases
Adolescent health education and counseling(1 case)	Diagnosing any deviations from proper growth and following up the cause by conducting an interview with the mother, giving the necessary recommendations and possibly the necessary referral to a doctor in 2 cases	Family planning consultation(2 cases) , other types of consultations (3 cases)

education and counseling of menopause related issues 1 case	proper breastfeeding education to the mother (3 cases)	Changing the method of family planning by doing the necessary counseling (1 case)

Marriage education and counseling (2-1 cases)	Complementary nutrition education (2 cases) from beginning up to one year old) and up to two years old (2 cases	Providing a variety of appropriate family planning methods to clients, including oral pills, condoms, ampoules, IUDs, etc. by performing examinations and requesting the necessary tests in each case. (each of at least 5 cases)
Sexual function education and counseling (1 case)	Education of Breastfeeding (1 case)	IUD insertion (8-6 cases)
Training of health liaisons in 1 related subject	Teaching proper nutrition to children over 2 years old	Remove the IUD (1 case)
Community health section (rural city): includes 4 days in the city and 4 days in the village	Diagnosis, care and education (1case of diarrhea 1 in respiratory disease, 1 case of in thrush, 1 in hypoglycemia and 1 in fever)	Individual or group education and administration of family planning (at least 2 cases)
Providing an educational class in a girls' school (1 case)	**section of Maternity Care:**	Preparation of pamphlets, booklets or educational posters in different parts of the internship
Providing an educational class for women with specific needs in a determined center a subject (1 case)	making the medical record for new clients (2 cases)	**Vaccination section:**
Visiting a factory or the place where women work - providing them the necessary health education-(1 case)	Measurement of height, weight and blood pressure (5 cases)	apply the cold chain at the time of vaccination
Visit and provide maternal and child health services in the rural health center	Performing physical examinations and Leopold maneuver (5 cases)	Applying aseptic principles at the time of vaccination
Visiting the headquarter center in the health network and familiarity with the work of collecting health information and monitoring the Vital Horoscope preparation center and its interpretation by the student	Fetal heart sound control and maternal vital signs (5 cases)	Using the correct method of prescribing and injecting different types of vaccines

Providing educational classes in the mosque for women	Request for routine pregnancy tests 5 cases	Prescribing and injecting 18 vaccines for children out of 3 vaccines
Visit a center for the elderly and women with disabilities and provide training for them	Educate the pregnant mother about self-care in various subjects: nutrition, sleep, rest and personal health and sexual relations, danger signs, exercises, pregnancy exercises, etc. 2	Prescribing tetanus vaccine for pregnant women (2 cases)
Visiting homes in the city and villages with the help of liaisons or health workers		

Kindergarten visits and pre-school education on child health issues	Conducting group training for pregnant mothers with topics related to pregnancy education(1-2 cases)	Vaccination scheduling based on intervals and type of vaccine for a child who has started the vaccination
Carrying out a project to solve or management a health problem (1 case that (mentioned in the contents)	Attention and examination about oral health of pregnant women and referral to the dentist in necessary cases(2 cases)	Vaccination scheduling based on intervals and type of vaccine for a child who has not started his or her vaccination (2cases)
In addition to any other community health program that is relevant to the area of study.	Tips on tetanus vaccination (2 cases)	Identify contraindications to the vaccination
Participate in questions and answers and study theoretical topics determined by the instructor	Breast examination and examination to prepare for breastfeeding (1 case)	Diagnosis and correct implementation of differences vaccine in children and adults

Main course references: The same theoretical course resources

Student evaluation method in different areas:

Active presence of the student - doing homework and assigned tasks - performing care related to the client or patient -participating in final exam

Course Code: 80

Course Name: Neonates who need intensive care internship
Prerequisite or concurrent: None
Number of credits: 1 credit
Type of credit: Practicum

General Purpose of the course: To develop skills in students in order to provide the necessary care for various problems and diseases of infants admitted to the neonatal ward and neonatal intensive care unit.

Course Description: This course helps midwifery students to diagnose abnormalities in newborns and also to provide the necessary care for sick and high-risk newborns in the relevant departments.

Outline: (51 hours):

Necessary care of high-risk neonates in the neonatal ward and NICU (NICU6-3 days depending on available facilities)

During 9 days (6 hours a day with 15 minutes of rest) (there is no problem in doing more than what is set by the student)

<table>
<tr><td>Performing neonatal examination at the time of discharge 1 case</td><td>High risk baby care (RDS or jaundice)</td><td rowspan="4">physical examination of term infants involves: examination of head and neck and fontanelles, face, chest, heart, abdomen, spine, color, pelvic joint, Babinski test, genital tract, fetal age tests, reflexes and nerve tests (10 cases)</td></tr>
<tr><td rowspan="2">Working with pulse oximeter and ventilator devices, 1 case each</td><td>Ability to work with ambo bag and laryngoscope (1 observation 1 case of neonatal CPR</td></tr>
<tr><td rowspan="3">Training on vaccination, nutrition and care of the infant, growth of the baby, urine and feces ,crying of the baby, change of clothes and diaper, newborn danger signs, necessary tests, umbilical cord care, fever and seizures, etc.</td><td>Premature baby care in 1 case</td></tr>
<tr><td>Baby care in the incubator (2 cases)</td></tr>
<tr><td rowspan="2">Caring for a baby with a disease and a complication (2 cases)</td></tr>
<tr><td>Preparation of an educational pamphlet (individual or group)</td><td>education for breastfeeding(2 cases)</td></tr>
<tr><td>Familiarity with the process of CPR of the baby and performing it on the model (1 case observation or helping for CPR if possible)</td><td>Calculation of medication and execution of doctor's prescription in 3 cases</td><td>Perform 1 case Lavage
By inserting a catheter</td></tr>
<tr><td>work with incubator (1 case)</td><td>intravenous feeding and electrolytes (3 cases)</td><td rowspan="2">Perform the gavage by inserting a gastric catheter (1 case)</td></tr>
<tr><td>phototherapy device (1 case)</td><td>Blood sampling from a vein or sole of the foot (3 cases)</td></tr>
</table>

observe and help a blood transfusion (1 case)	One case of consultation if possible	Anthropometric and weight measurements (2 cases)
Caring and working in the ICU for 3-6 days	Teaching the mother about how to give medicine and feed the baby (1 case)	
Participate in questions and answers and study theoretical topics		

Main references of the course: The same theoretical course resources

Student evaluation method in different areas:

Active presence of the student - doing homework and assigned tasks - performing care related to the client or patient - participating in final exam

Course Code: 81

Course Name: Medical and surgical diseases in pregnancy internship

Prerequisite or concurrent: -

Number of credits: 1 credit

Type of credit: Practicum

The general purpose of the course: to develop students' skills to diagnose internal diseases and surgery in pregnant mothers and how to manage and treat them, as well as possible complications of these diseases on pregnant women, fetuses and infants and how to prevent and reduce these complications and necessary training and counseling for patients.

Outline: (51 hours)

Performing examinations, examining the course of diagnosis and treatment, as well as performing necessary care, education and counseling in pregnant women suffering from diseases and internal problems and surgery

Course description: This course helps midwifery students to get familiar with the causes, diagnosis, treatment and complications of internal diseases and surgery associated with pregnancy, and can perform the necessary prenatal care for these patients during pregnancy and diagnose referrals and refer to specialists. And do the relevant centers and do the necessary follow-ups, trainings and consultations.

During 9 days (6 hours a day with 15 minutes of rest) in at least 15 different pregnant patients (there is no problem in doing more than the prescribed cases)

<table>
<tr><td rowspan="2">Diagnosis according to history and physical examination, request, interpretation of tests and paraclinics as well as observation and evaluation of their treatment along with necessary care, providing necessary training, identification of relevant drugs, etc., based on their importance in pregnancy (12 days including 12 internal cases</td><td>Analysis and recognition of changes in important paraclinical tests in pregnancy and its interpretation</td><td>Prepare an accurate history of 15 pregnant women with internal diseases and surgery</td></tr>
<tr><td>Quickly obtain the required information from the patient's record</td><td>Perform their complete physical examinations</td></tr>
<tr><td>Giving the necessary education to the mother</td><td>Provide a correct and accurate report of the patient's condition to the instructor</td><td>Diagnosis of abnormalities in history and examination</td></tr>
<tr><td>Planning pregnancy care in the mothers till th end of pregnancy</td><td rowspan="3">Diagnosis and observation, management and treatment of internal emergencies and surgery in pregnancy</td><td>Request the necessary tests as needed</td></tr>
<tr><td>Perform a care process by each student</td><td rowspan="2">Analysis of abnormalities of important paraclinical trials</td></tr>
<tr><td>Participate in questions and answers and stud theoretical topics</td></tr>
</table>

Main course references: The same theoretical course resources

Student evaluation method in different areas:

Active presence of the student - doing homework and assigned tasks - performing care related to the client or patient - participation in final exam

Course code: 82

Course name: Management and its application in midwifery practicum/ internship
Prerequisite or concurrent: None
Number of credits: 1 credit
Type of credit: Practicum

The general purpose of the course: Introduction to management in the profession of midwifery and application of its principles in managerial situations, especially in the fields related to midwifery employment.

Course description: This course helps students to become familiar with the principles of management in the midwifery profession and the environments in which midwives work and to apply them practically "in improving the conditions of the workplace and in order to improve the quality of midwifery services to clients and patients."

Outline: (51 hours):
Performing managerial duties, especially in departments related to midwifery, such as delivery, postpartum, obstetric and infant's wards, prenatal and gynecological clinics, and hospital management offices.
9 days (6 hours a day with 15 minutes of rest) (there is no problem in doing more than the prescribed cases)

<table>
<tr><td>A: Problem solving (in the form of evaluating the achievement of set goals)</td><td>A: Execution of the problem solving process (based on the best solution selected in the second week)</td><td rowspan="5">A: Preparation of a written project about the structure or clinic related to midwifery work:
-1Physical structure in the form of a sketch
-2Preparing a list of medical and non-medical devices
-3Status of hospitalized patients in terms of: medical diagnoses, care needs, educational needs
-4Average number of patients admitted, admitted and discharged
-5Section routines including:
How to accept patients
How to discharge patients
- How to write reports and examinations and tests
How to educate the patient
How to implement care and treatment processes
Arrangement of file sheets
- How to do consultations</td></tr>
<tr><td>B: Designing a monthly staff shift schedule</td><td>B: Providing a standard of care based on the education of the department (in the form of educational pamphlets, educational posters, etc.)</td></tr>
<tr><td>A: Assessing the status of provided care to patients, especially critically ill patients</td><td>A: Implement the principles of taking over the ward through:
1- Attending the ward on time
2- Going to the bed of patients
3- Paying attention to all written and oral reports of the head of the ward about patients
4- Paying attention to the equipment and drugs delivered in each shift</td></tr>
<tr><td>D: Carrying out activities related to the guidance of students and human resources of the ward</td><td>D: Implement the principles of section delivery
via:
1- Delivery of patients t
2-Delivery of special tools, medicines and equipment</td></tr>
</table>

	3- Registration of all reports related to patients according to the correct principles of reporting	How to request tests How to check the doctor's instructions? How to complete the cardex - How to enter information into the computer 6 -Preparing a list of names of doctors, residents, interns And nursing and midwifery students, etc. and the days of their presence 7 -Preparing a list of commonly used drugs in the ward and their care and prescribing tips 8 -Preparing a list of tools and equipment available in the section code trailer and its available drugs 9 -Preparing a list of diagnostic methods (Tests), how to perform them and necessary preparations for patients (to perform them) 10 -Preparing a list of names of nursing and midwifery staff and other staff and the number of each of them in each work shift 11 -Awareness of the protection and security systems of the sector and its control 12 -Awareness of the methods of dividing human resources in the sector 13 -Preparing a list of technical and installation problems B: Presenting the above written report and fixing its problems
E: Establishing appropriate and effective communication with doctors, midwives, nurses, students, patients, patient companions, service personnel and other parts of the hospital	**E:** Active participation in the visit of doctors and other members of the health and treatment team through: 1- Accompanying the doctor or other team members in the clinic 2- Checking the doctor's instructions according to the relevant principles 3- Entering commands in the card, medicine cards and computer 4-Performing appropriate actions following orders (including following up on consultations, requests, etc.)	
F: Performing activities to control infection in the ward (according to the available facilities and conditions) through: 1- Providing practical suggestions for infection control 2- Implementing educational programs to control the infection)For staff and students)	**F:** Control and supervision of the affairs of the ward through: 1- Frequent and purposeful rounds in the department and gaining knowledge about: 2- Activities of other team members, including: Doctors, nurses, midwives and students	
F: Proper cooperation with all departments in appropriate circumstances	**F:** Calculating the number of required manpower (professional and non-professional) and the number of each of them in each shift	
	G: Preparation of daily statistics of patients	
	H: Preparing the patient's nutritional list and controlling and supervising its proper implementation	
Participate in questions and answers and study theoretical topics determined by the instructor	I: Preparation of various requests, including: Tests, warehouse equipment, etc**.**	
	J: Anticipation of all equipment and drugs needed for other shifts in the morning shift or before the holidays	**A:** Designing a problem-solving process, in case of one of the existing problems of the department as:

	K: Controlling the presence of students in the ward and submitting the necessary report to the instructor or head of the ward	1 -Expressing the problem clearly 2 -Explaining the reasons for the formation of the problem 3 -Determining measurable goals (with measurable criteria) 4 -Providing possible solutions 5 -Selecting the best solution according to the conditions and facilities available in the section B: The daily division of human resources and nursing and midwifery students according to its principles 1 -For nursing and midwifery students in coordination with the relevant instructor and Head of Department 2 -For the relevant nursing and midwifery staff in coordination with the Head Department 3 -Installing it on the bulletin board or registering it in a special office
	L: Active participation in the clinical rounds of supervisors through: 1- Visiting the physical environment of the ward, equipment and facilities 2- Investigating the performance of nursing and midwifery staff and their communication 3- Investigating how to record information and reports 4- Studying the clinical condition of patients and providing services to them 5- Preparing a list of errors in each of the above cases 6- Providing appropriate reminders to the department officials 7 -Follow-up to eliminate the mentioned problems	
	M: Proper cooperation with the staff of the department with the necessary conditions	

Main course references: The same theoretical course resources

Student evaluation method in different areas:

Active presence of the student - doing homework and assigned tasks - performing care related to the client or patient - participation in final exam

Course Code: 83

Course Name: Radiology, sonology and electrology in obstetrics and gynaecology practicum
Prerequisite or concurrent: None
Number of credits: 1 credit
Type of credit: Practicum

The general purpose of the course: students will get familiar to perform, read, see and interpret paraclinical methods such as radiology and sonography, as well as how to use electrocardiograph and physiotherapy in midwifery. Also familiarity with the devices used in midwifery diagnoses such as fetal monitoring devices, ultrasound and tennis, etc.

Course description: This course helps students to become familiar with the application of paraclinical methods such as radiology, sonography, electrocardiography and physiotherapy in midwifery cases and, as far as possible, recognize or interpret their results and apply them to midwifery clients. Also learn to use devices such as monitoring, sonography and TENS

Outline: (51 hours):

Observing and performing radiology, especially pelvic ultrasound of pregnant and non-pregnant women for 8 days in the sonography and radiology department of a teaching hospital. Maternity ward as well as with TENS machine and exercises and movements related to pain relief, especially in the pelvis, knee, neck, neck and massage to reduce pain or urinary incontinence and relaxation along with exercises related to pregnancy and postpartum period.

9 days (6 hours daily with 15minutes rest) including 9 days of sonography and radiology and 3 days of electrology and physiotherapy

Note: (There is no problem in doing more than what is set by the student)

observe different parts of the laser device and how it works	monitoring using the relevant device	observe and interpret simple radiographs of the pelvis
observe a variety of heating and cooling devices and methods to relieve pain	observe different parts of ultrasound devices	Observe and interpret radiographs of the pelvis and uterus with radiocontrast agent
Observe different types and sections of TENS devices	Finding the uterus, bladder and ovaries of women (pregnant and non-pregnant) as well as the head, chest, abdomen, limbs, fetuses and placenta on ultrasound	Recognize high quality radiological images from a low one
Use of the TENS device at least once, especially to relieve the pain of dysmenorrhea, labor pain and urinary incontinence	Measurement of biparietal diameter, femoral length, head circumference and abdominal circumference using sonography	observe different sections of radiology devices
Giving exercises to relieve back pain, especially in the neck, back and pelvis, as well as knee pain to patients (pregnant or postpartum)	Interpretation of ultrasound images of pregnant and non-pregnant uterus and fetus and placenta	visit different sections and how to do radiotherapy

Giving exercises during pregnancy	Observation of biophysical profile testing for fetus	Fetal auscultation with sonicaid (Doppler)
Giving exercises after childbirth and giving Kegel exercises	Observing different parts of electrocautery and freezing devices (cryo)	Observe different parts of the monitoring device
Observe and perform various types of massage therapy to relieve pain and for relaxation	Perform or observe an electrocautery and freeze the cervix	Installing and replacing paper, preparing the monitoring device
Participate in questions and answers and study theoretical topics		

Main course references: The same theoretical course references

Student evaluation method in different areas:
Active presence of the student - completing homework and assigned tasks - performing care related to the client or patient - end-of-course exam

Season Four
Curriculum evaluation
Undergraduate course (BSc)
Midwifery

Evaluation of the curriculum of the undergraduate course of midwifery

1) The purpose of evaluation
The purpose of the evaluation is to identify the strengths and weaknesses of the educational program as well as the strengths and weaknesses in the implementation of the educational program in educational centers.

2) Implementation of the evaluation
In universities, the Office of Supervision and Evaluation under the supervision of the Deputy for Education and the corresponding offices within the faculties continuously monitor the implementation of the course. The relevant educational group is also required to submit a report at the end of each academic year on the number of admitted students, offered courses, grades and educational status of students and, quality of education of professors, books, purchased equipment and existing problems, etc. Also, the officials of the faculty and the department together with the evaluation unit, after reviewing the report and the results of the evaluation, should provide the necessary solutions and take action to eliminate the shortcomings and problems.

3- Steps and how the evaluation is performed
During the study period, evaluation of theoretical and practical courses and internships are done regularly by the office / committee of evaluation and monitoring. Summary of students' opinions about the courses and the quality of their professors' education and interaction in each semester also the opinions of the group manager during the year, will be the criterion for selecting professors providing the courses. At the end of the course and at the time of graduation, the quality questionnaire of the course will be completed by the graduates and after analysis the Office of Supervision and Evaluation will sent them for design in the group council. At the end of the semester, the instructors of the course will comment on the content of the course, how to present it, the time of presentation, the required facilities, how the students will participate, how to conduct the internships, etc. in a questionnaire. Graduates will be questioned after their studies and especially after employment.

4) Frequency of evaluation
A- Evaluation by students on a semester basis and also at the end of the study period
B- Evaluation by teachers at the end of the semester and also for each study period at the end of the final exam
C- Internal evaluation by the educational group every 2-3 years
D- External evaluation every 2-3 years
E- Evaluation by supervision and evaluation of the faculty every 2-3 years
F - Evaluation by the Office of Supervision and Evaluation of the University and the Ministry every 4 years
G- Evaluation by the Board of Examiners and planning midwifery evaluation every 4 years
H- Reporting on the quality of work and activities of graduates every 4 years
5) Suggested indicators for program evaluation
A- The level of student satisfaction with the study, the managers and officials, the quality of the professors, the method of presenting the materials, the quality of the internships and the conditions of the clinical educational environment, educational and research facilities, etc.
B- The employment of the graduates after graduation and the relation between their job and specialty and the manager's satisfaction with their work and also the satisfaction of their clients with the completion of the questionnaire
C- Graduate satisfaction with the acquired abilities and the possibility of employment and earning income and solving the problems of life and society in various relevant dimensions
D- Professors' satisfaction with the quality of management officials and management structure, quality and quantity of educational and research facilities regarding the field, quality of students' work and interact method with them and professors' opinion about the educational program and courses and implementation method
E- The quality of theoretical education (including complete and up-to-date teaching of content, field and specialty of the relevant professor, teaching method and students' learning, etc.) as well as the quality of clinical education (including complete and sufficient training of clinical skills and minimum basic skills, field and specialty of the relevant professor, facilities and equipment and number of monthly and daily clients of the relevant ward or clinic, possibility of independent work by student and instructor, number and ratio of instructor to student, maximum ratio of instructor to student in childbirth 1: 3, In prenatal and gynecological diseases and health and infants it is 1 to 4 and in other units it is 1 to 5 {Note: it can be less but it cannot be more} .)
F- For the annual admission of 20-25 undergraduate students, it is necessary to have a hospital or hospitals with at least 250 normal deliveries per month and also to have specialized departments of internal medicine and surgery and gynecological diseases and infertility.
G- Also, the existence of the approved midwifery educational group (s) in the organizational chart of the faculty

H- Evaluation of the quality of the final clinical test in the fields of childbirth, prenatal, gynecology, maternal and child health and fertility and family planning and infants and children
I- Adequacy of library resources, online computer facilities, and classes equipment's like audio-visual equipment and extracurricular activities for midwifery students
J- Assessment of the performance and adequacy of the minimum basic midwifery skills that students should acquire during internships and at the end of the course.
K- Welfare, recreational, sports and cultural facilities for faculty members and students

6) Program success criteria for each evaluation index
In all the above cases, after evaluating the result of 90% and above, indicating the desired quantity and quality and obtaining the result 90-80% indicates a relatively "good" result and 80-70% indicates an acceptable result and less than 70% indicates an unacceptable result and the inability to train the students.

First appendix

Midwifery Oath

God, I will give you endless praise that you bestowed me blessings and that you have accompanied me, as a midwife, on the path of creation.

In the presence of the Holy Quran[1]*, I swear that [like Hazrat Fatima (GPBUH)[2] as my role model] I will always be diligent in understanding the knowledge of creation and fertility and the desired survival of human beings with love and faith until the last moment of my life, I will be faithful to the essence of creation and protecting it is my serious duty. With the purity of heart and soul that is necessary for trustworthiness, I will use the skills of my hand and mind with the support of science, to completely protect and guide the growth and development and birth of the pearl of creation until puberty and during her fertility and after.

I also swear, I adhere to the holy rules of Islam* and the divine laws, and by observing the sanctity and spirituality of the profession and the ethics and rules of the midwifery profession, I avoid low desire of soul and protect the rights and secrets of clients and patients according to the holy sharia and the laws of the Islamic Republic of Iran.

O God, [in the name of Zahra (GPBUH)]

Give me

Beauty,

Guidance,

Satisfaction and

Trustworthy and help me to fulfill my responsibilities in my career, without error, which I promise Amen

Date name and signature of the graduate

[1] * Religious minorities will say the name of their book instead of the Quran and the name of their religion instead of Islam and may not read the phrases in parentheses. 2. God's peace be upon her

Final Appendix of the Undergraduate (BSc) of Midwifery Training Program (Practicum/Internships):

Table of contents of procedures

and the work that midwifery students need

during their various internships of their studies.

(Note: the department head must provide the sheets related to the table of contents of the internship procedures to the relevant instructor by in each internship. Also, the relevant instructor must install these sheets in internship location and / or male them available to the students.)

List of student activities related to Principles and techniques of nursing, midwifery and working in operating and delivery room Practicum (course code 16)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 12 days (4.5 hours daily) 2 days out of 12 days must be in the operating room	Quality and considerations
1			Oral care	
2			Make the closed and open hospital bed	
3			Moving the patient from the bed to the wheelchair and the stretcher and vice versa	
4			giving the position to the patient (different types)	
5			Giving active and passive exercises	
6			Control the blood pressure and record it	
7			Breathing control and recording	
8			Pulse control and recording	
9			Temperature control (A. O. R) and its recording	
10			admission of the patient in the ward	
11			Control I, O and recording it	
12			Inserting a washbasin and taking a stool sample (simple and culture)	
13			Urine sampling (simple, culture)	
14			Enema	
15			Bladder wash	
16			Urine glucose, acetone and protein control	
17			Cold and dry compresses (non-sterile)	
18			Hot and dry compresses (non-sterile)	
19			Isolated patient care (respiratory, contaminated blood, contaminated feces))	
20			Feeding (through the mouth)	
21			Stomach catheterization	
22			Gavage	
23			Lavage	
24			Bladder catheterization	
25			Giving the oxygen (catheter, mask, cannula)	

26			Suction of mouth, nose, throat in different ways and knowing how to work with suction device	
27			How to place the airway and care for artificial passages and observe placing the endotracheal tube	
28			Performing 5 cases of bondage, sterile compress	
29			Washing infected wounds	
30			Removing sutures	
31			Bandage	
32			Oral medication	
33			Giving medication or intramuscular injection in 5 cases	
34			giving medication or intravenous injection in 5 cases	
35			giving medication or subcutaneous injection in 2 cases	
36			Intradermal test in 1 to 2 cases	
37			Inserting intravenous catheter and serum and its care and how to calculate and combine drugs in 5 cases	
38			Eye, ear, nose drops	
39			Suppository (vaginal, rectal)	
40			Taking a blood sample	
41			Connecting blood and its derivatives and related care	
42			Patient discharge, patient and family education	
43			Educating the patient	
44			Bathing in bed (full / with patient assistance)	
45			Bathing in shower and bathtub	
46			Massage the pressure points	
47			Washing the head and taking care of the infected head	
48			Perineal wash	
49			Providing comfort, rest and sleep	

			for the patient	
50			Bathing the infant (can be done in infant internship)	
51			Measuring the height, weight, head and chest circumference of the neonate	
52			Observing the professional behavior of the midwife in the delivery room	
53			Preparing the patient for the operating room	
54			Sterilizing equipment and fabrics (Autoclave and oven)	
55			hand washing	
56			Wearing scrubs and mask	
57			Wearing gloves	
58			observing all types of pliers, needles and cloth accessories related to surgery	
59			Preparing the patient for the operating room	
60			Disinfecting the room	
61			Intraoperative care	
62			Postoperative care	
63			observing recovery room equipment	
64			Admission of the patient from the recovery room	
65			Observing the operating room environment and how to work in it	
66			observing different types of operations (at least 2 cases of cesarean section)	
67			Caring for the corpse	
68			Observing the environment and equipment of labor and delivery and postpartum room	
69			observing how to work with Bennett device	

70			Observing how to work with infant CPR units or devices in delivery room	
71			Recording the care provided and the patient's condition in the files and booklets	
72			Checking the patient's file in terms of different parts	
73			Checking the types of files in the ward	
74			Participating in questions and answers and study theoretical topics determined by the instructor	

List of student activities related to semiology and Physical Examinations Practicum (course code 39)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 12 days (4.5 hours daily) 2 days out of 12 days must be in the operating room	Quality and considerations
1			How to deal with the patient and start interview	
2			Get a complete history of the disease References: General characteristics, main complai recent discomfort description, medical records, personal and social records, family records and a review of differe body systems (at least for 10 different patients)	
3			Description of the general condition o the patient including: level of consciousness, patient's condition at th time of examination, degree of patient cooperation	
4			Height, weight and body mass index (BMI)	
5			Examination of vital signs	
6			Examination of the skin and appendag including: Color, humidity, heat and. skin, color, Consistency, shape and angle of nails, distribution of hair loss	
7			Investigation of lymph nodes, periphe and central pulses, JVP jugular veins	
8			Head and neck examination including Skull, face (in terms of shape, symmetrical fracture, depression, protrusion), trachea, thyroid	
9			Ear examination includes: Outer ear, eardrum, inner ear, whisper test	

10			Throat and nose examination includin Throat, external nose, external cavity, sinuses	
11			Eye examination including: External and internal structure of the e vision, eye movements	
12			Examination of the lungs (anterior and posterior) including: Observation: Speed, rhythm, depth an respiratory effort, chest shape and movement Touch: Determination of sensitive are Evaluation of respiratory dilation, Evaluation of tactile vibration Accuracy: Evaluation of different part the lung Hearing: Recognition of normal lung sounds and their location (vesicular, bronchocular, bronchial and tracheal), abnormal lung sounds, crackle, wheezing, ronca, friction Rob) and transferable speech sounds	
13			Breast examination: Observe: size, symmetry, shape and appearance Breast skin, color, thickening or edem Venous, nipples Touch: Tissue consistency, Sensitivity Nodules, Secretion, Examination of axillary and supra lymph nodes and infraclavicle	
14			Cardiac examination: Observe: PMI and change in pregnanc PMI Touch: PMI, change in pregnancy PM Hearing: Normal sounds (S1 and S2) a abnormal sounds (EJ, OS, S4, S3), typ of systolic and diastolic murmurs, physiological changes of cardiac heari during pregnancy	

15			Abdominal examination: Observe: Abdominal skin, umbilicus, abdomen shape, Enlarged limb symmetry, peristalsis, Aortic pulse Hearing: BS Vascular sounds Percussion: normal sounds (tympanun resonance) and abnormal sounds Touch: superficial touch, deep touch, liver, spleen, kidney, tenderness, rebou tenderness, CVA tenderness, pain examination, ascites evaluation, appendicitis evaluation	
16			Examination of limbs and spine including: Examination of the joints of the limbs including: observation of color and swelling, touch of swelling and heat, restriction of movement, examination the spine: observation of shape, chang in curvature and protrusion, touch of sensitivity, restriction of movement	
17			Psychological examination: mental sta level of consciousness, cranial nerves, motor and sensory nerves, reflexes	
18			Prepare the final report of the history a examinations	
19			Participate in questions and answers a study theoretical topics determined by instructor	

List of student activities related to Normal Pregnancy Practicum (course code 28)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 12 days (4.5 hours daily) 2 days out of 12 days must be in the operating room	Quality and considerations
1			-Taking history and physical examination from 25 normal pregnant women (5 observations and 15 performed) with providing necessary educatio -Brief acquaintance with 5 high risk pregnancies within 12 days	
2			Taking a history and psycho-socia and physical evaluation from 5 cases of abnormal pregnant women including various internal diseases and surgery associated with pregnancy such as heart, diabetes, renal urinary tract infection, anemia, perinatal anemia, perinatal ectopic pregnancy, menopause, ectopic pregnancy and 10 times Leopold maneuver	
3			Perform 15 complete physical examinations of different organs o the body (heart, lungs, thyroid, anemia, kidneys, breasts, lower limbs)	
4			scribing authorized and essary drugs ng pregnancy	

			10 pregnant women	
5			uest 1-2 times U / A, U / C ng pregnancy	
6			uest 1-2 case of rasound	
7			ee NST, 1-2 times	
8			Perform 1-2 rounds of Roll over test	
9			Interpretation and correct guidance based on the results: 10 cases	
10			Interpretation and correct guidance based on the results of ultrasound or fetal evaluation tests:3 cases	
11			Examination of at least 10 lower extremities for edema and its extent and varicose veins	
12			Teaching and explaining a case of fetal movement testing	
13			Providing different trainings during pregnancy in 2 different subjects (in class or individually)	
14			Interpretation and correct guidance based on clients' test results in 10 cases	
15			Participate in group discussions an study the theoretical topics	

List of student activities related to the Neonatology Practicum (course code 35)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 12 days (4.5 hours daily) 2days out of 12 days must be in the operating room	Quality and considerations
1			10 cases of physical examination of the infant in terms of health examination: examination of head and neck and fontanelles, face, chest, heart, abdomen, abdomen, spine, color, pelvic joint, Babinski test, genital tract, fetal age tests, reflexes and nerve tests	
2			Training on 2 cases of breastfeeding	
3			Perform a gavage case by inserting a catheter	
4			Perform 1 case of lavage by inserting a catheter	
5			Weight measurements in 5 cases	
6			Bathing, covering clothes and keeping the baby warm 2 cases	
7			Healthy care of neonates in 3 cases	
8			Premature neonates' care in 2 cases	
9			Working with the incubator and caring for the neonates in the incubator in 3 cases	
10			Working with phototherapy device 1 case and getting familiar with other devices and devices	
11			High risk neonates care (RDS jaundice)	
12			Calculation of medication and execution of doctor's prescription in 3 cases	
13			Connect serum 1 case	
14			Perform anthropometric measurements 8 cases	
15			Teaching the mother about how to give medicine to the baby 1 case	
16			See 1 consultation and if possible 1 consultation	
17			Performing neonatal discharge examination 1 case	

18			Vaccination training, nutrition and care of the baby, growth of the baby, urine and feces and crying of the baby, change of old clothes, newborn danger signs, necessary tests, umbilical cord care, fever and seizures, etc. 2 cases	
19			Familiarity with neonatal CPR devices and its application on case modeling and observing 1 case of neonatal CPR	
20			How to work with incubator and care of the device 1 case	
21			How to work with a phototherapy device and do 1 thing	
22			Participate in questions and answers and study theoretical topics	

List of student activities related to the Pediatrics Practicum (course code 37)

Student Name: Date: Internship Place: Instructor Name

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 12 days (4.5 hours daily) 2days out of 12 days must be in the operating room	Quality and considerations
1			Examination of the child (head, neck, ears and nose, heart and lungs, abdomen, liver and spleen, genitals, and organs, urinary system, etc.)	
2			Evaluation of VIS symptom in children and its differences with adults	
3			Differences in laboratory criteria such as Hb, HCT, FBS, Ca, Mg, P, urinary alkaline phosphatazokratinin ... in children and adults	
4			Examination of the child's development from the point of view of the nervous system and related examinations and tests: study of mental retardation due to coronary heart disease, etc., seizures in children and its manifestations, academic failure due to brain problems, etc.	
5			Examination of the child for anemia	
6			Examination of the child for growth (growth retardation, abnormal growth spurt)	
7			ECG training from children (ECG)	
8			Participate in questions and answers and study theoretical topics	
9			Training parents to perform the correct EEG (in terms of time and sleep deprivation before exercise)	
10			Teaching children and parents proper nutrition, exercise and play	
11			Education, evaluation and recommendation of correct vaccination in children in different situations and conditions	

12			Observation, examination, diagnosis of symptoms and manifestations, administration and follow-up of common infectious and non-infectious diseases in children, including at least 15 cases of various diseases	

List of student activities related to the Internal Medicine and Surgery Practicum (course code 44)

Student Name: Date: Internship Place: Instructor Name

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 12 days (4.5 hours daily) 2 days out of 12 days must be in the operating room	Quality and considerations
1			Prepare an accurate history of the patient	
2			Perform a complete physical examination of the patient	
3			Diagnosis of abnormalities in history and examination	
			Request the necessary tests as needed	
4			Analysis of abnormalities of important paraclinical tests	
5			Analysis and recognition of changes in important paraclinical tests during pregnancy and its interpretation	
6			Quickly obtain the required information from the patient's file	
7			Provide a correct and accurate report of the patient's condition to the instructor	
8			Diagnosis and observation of urine and treatment of internal emergencies and surgery	
9			Diagnosis of common diseases of various organs of the body that follows according to history and physical examination, request, interpretation of tests and paraclinics, as well as observation and evaluation of their treatment, including the necessary care, providing the necessary training, recognizing relevant drugs and ... relying on Their importance in conceiving during 12 days includes 20 internal cases (2-3 cases from each device) and 5 surgical cases including:	
10			Cardiac (mitral stenosis, mitral prolapse, increase and decrease of arterial blood pressure, coronary artery disease ...)	
11			Vascular (heart failure, arterial embolism, thrombophlebitis, varicose veins, etc.)	
12			Respiratory (pneumonia, tuberculosis, asthma, pulmonary embolism, restrictive and obstructive diseases, etc.)	
13			Common blood diseases (including iron deficiency, thalassemia, bleeding diseases,	

			etc.	
14			Common glandular diseases (such as diabetes, hypothyroidism and hyperthyroidism, Sheehan syndrome, Cushing, etc.)	
15			Neurological diseases (headaches, epilepsy, CVA)	
16			Common urinary tract diseases (including renal and urinary tract infections, acute and chronic renal failure, glomerulonephritis and urinary stones, etc.)	
17			Common infectious diseases such as rubella, hepatitis, herpes, etc.	
18			Gastrointestinal (such as wounds, infections, diarrhea, constipation, bleeding, indigestion, etc.)	
19			Skin diseases and allergies (hives, itching, fungus, viruses and parasites, pigmentation, etc.)	
20			Motor and collagen (carpal tunnel syndrome, major bone fractures, joint relaxations, rheumatic fever, rheumatoid arthritis, lupus, bone and joint infections)	
21			Common surgeries (including appendicitis, heart surgery, stones, varicose veins and hemorrhoids, thyroid, breast, etc.	
22			Participate in questions and answers and study theoretical topics selected by the instructor	

List of student activities related to the Forensic Medicine in Midwifery Practicum (course code 24)

Student Name: Date: Internship Place: Instructor Name

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 12 days (4.5 hours daily) 2 days out of 12 days must be in the operating room	Quality and considerations
1			Observation and examination of girls, women and children who have suffered from aberrations, problems and sexual issues	
2			Observation and examination of forensic clients who have performed a criminal abortion	
3			Observation and examination of forensic clients who have become pregnant illegally (proof of pregnancy)	
4			Observation and examination of Hymen	
5			See how to prove the identity of the child and to whom it belongs	
6			Examine women who have been abused or modestly abused	
7			Observation and examination of children who have been abused	
8			Performing examinations of forensic clients to determine and prove pregnancy	
9			Familiarity with how to examine sexual victims, clinical signs and symptoms of rape, how to sample and send to the laboratory if necessary	
10			Record one of your examinations as a midwife and reporting in accordance with legal regulations and standards	
11			Participate in a hearing on a midwife's misconduct case	
12			Record one of your examinations as a midwife and reporting in accordance with legal regulations and standards	
13			Participate in questions and answers and study theoretical topics selected by the instructor	

List of student activities related to the Normal Delivery Practicum (course code 30)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 13 days (10 hours daily) (1hour for rest and pray)	Quality and considerations
1			taking a history, physical examination and doing Leopold maneuvers, and getting vital signs in 20 cases	
2			FHR control in at least 100 cases (for labor control) including finding the correct location, checking the fetal pulse with the mother's pulse, complete one-minute control, necessary control immediately after contractions and counting and getting familiar with the monitoring devices	
3			Vaginal examination: dilatation, effacement, station, fetal position, cervical position, amniotic sac position and to some extent pelvic examination (12-20 times)	
4			Necessary examination and deciding to hospitalize mother in labor in 3 cases	
5			Preparing the mother for labor room (clothing, bed, recommending to empty the bladder, taking a vein and serum, if necessary, blood sampling and necessary explanations) in 10 cases	
6			Complete management and control of labor (including control of heart sound, control of uterine contractions, nutrition, position, trustworthy relationship, necessary education and emotional support during childbirth, vaginal examination, attention to bladder emptying, helping to relieve pain using various methods, prescribing medication and fluid) in necessary cases, answering the questions of the mother ....) in 24 cases for at least 3 hours, 1-2 of them are receiving induction	
7			Perform amniotomy by observing all the necessary conditions in 1 case	
8			Diagnosis of delivery time and timely transfer the mother to delivery room in 4-10 cases	
9			Wearing gloves and scrub and using the equipment correctly and opening the pack correctly and providing the necessary	

			equipment by applying the correct principles of sterilization for 4-10 cases	
10			Properly perform prepping and draping for 4-10 perineal	
11			Performing correct episiotomy anesthesia in one case	
12			Diagnosing the need for episiotomy and observing 5 cases of anesthesia and 5 cases of episiotomy	
13			Observe 5 cases of deliveries	
14			Assistance 4 deliveries	
15			Complete delivery in 4-10 cases	
16			Monitoring the condition of the infant immediately after delivery (opening the airway, preventing hypothermia, stimulating breathing to improve Apgar score 1 and 5 minutes after birth in 4-8 cases)	
17			Umbilical cord clamp and physical examination of the baby, Vitamin K injection and monitoring of the bracelet and monitoring of the baby's foot print in 4-10 cases	
18			Assistance in repairing episiotomy or rupture in one case with necessary attention and care before, during and after repair	
19			Proper placenta delivery and complete examination of 4-10 cases	
20			Proper disposal of contaminated consumables and proper collection of non- consumables in the relevant places after delivery 4-10 cases	
21			Establishing bonding and attachment between the newborn and mother after delivery in 4-10 cases	
22			Provide comfort for patient and control the fourth stage (including hemorrhage control, checking uterine height and consistency, vital signs, patient's orientation every quarter to one hour) after delivery and correct registration and reporting it to the instructor / midwife in10-4 cases	
23			Provide complete postpartum education to the mother before delivery (including self-care and personal hygiene, bathing, wound care, lucia, nutrition, hygiene in defecation and urination, dangerous signs in the mother and the need for immediate referral, breastfeeding, vaccination, neonatal vaccination), Other neonatal care, neonatal danger signs, tests for screening for diseases leading to neonatal retardation, sexual intimacy and family reunification, as well as the	

			possibility of re-pregnancy and the time 24and place of subsequent visits) in 4-10 ca25ses.	
24			Discharge of the mother and performing the necessary examinations and educate mother during discharge about caring herself and her child in 2 cases	
25			Participate in group discussion and study the theoretical topics	

List of student activities related to the Normal and Abnormal Delivery Practicum (course code 32)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 13 days (10 hours daily) (1hour for rest and pray)	Quality and considerations
1			Note: Half to two thirds of the following should be used in cases such as diabetes, preeclampsia, premature rupture of the amniotic membranes, post-date / post term and previa, cardiac disease, twin, breech, fetal death, IUGR, preterm delivery, vacuum, etc. The name of each case should be recorded in the summary that the student writes for each individual so that it can be determined later whether each student has been trained in all cases and how many cases he / she has done in each case. (There is no problem in doing more than the amount predicted by the student.)	
2			Taking a history, physical examination and doing Leopold maneuver, and vital signs in 20 cases	
3			FHR control, at least in 100 cases (as much as necessary for labor control) including finding the right place, compering fetal pulse with maternal pulse, complete 1 minute control, necessary control immediately after contraction, counting and recording and using monitoring	
4			Vaginal examination: dilatation, effacement, station, position, cervical position, bladder position and pelvic examination (12-20 times)	
5			Necessary examination and decision to hospitalize the fetus in labor 3 cases	
6			Preparing the mother for the labor (clothing, bed, advising to empty the bladder, taking blood vessels and serum if necessary, and taking blood and giving necessary explanations to the delivery) in 10 cases	
7			Complete management and control of labor (including control of heart sound, control of uterine contractions, nutrition, position, trustworthy relationship, necessary education and emotional support during childbirth, vaginal examination, attention to bladder emptying, helping to relieve pain using various methods, prescribing medication and fluid) in necessary cases, answering the questions of the mother ....) in 24 cases for at least 3 hours, 1-2 of them are receiving induction	

8			Complete management and control of labor (including control of heart sound, control of uterine contractions, nutrition, position, reliable communication and necessary training and emotional support of childbirth, vaginal examination, attention to bladder emptying, helping to relieve pain using various non-pharmacological methods, Necessary fluid therapy in the required cases, answering the questions of childbirth or companion, etc.) 24 cases of each case for at least 3 hours, of which at least 2-3 cases are induction and half of them are cases	
9			Diagnosis of delivery time and timely transfer the mother to delivery room in 4-10 cases	
10			Wearing the right gloves and scrub and using the equipment correctly and opening the pack correctly and providing the necessary equipment by applying the correct principles of sterility and protection of 4-10 cases	
11			Properly perform prepping and draping for 4-10 perineal	
12			Perform correct episiotomy anesthesia in 2 cases and pudendal anesthesia in 1 case, if possible	
13			Diagnosing the need for episiotomy and performing episiotomy 2 cases	
14			Observe Labor management in almost 5 cases	
15			Complete delivery of 4-10 cases	
16			Monitoring the condition of the infant immediately after delivery (opening the airway, preventing hypothermia, stimulating breathing to improve Apgar score 1 and 5 minutes after birth in 4-8 cases)	
17			Umbilical cord clamp and physical examination of the infant, injection of vitamin K and supervision of the bracelet and taking the foot print in 4-10 cases	
18			Episiotomy 2 cases with necessary attention and care before, during and after repair	
19			Proper placenta delivery and complete examination of 4-10 cases	
20			Manual removal of the placenta and intrauterine examination in the fourth stage in 1 case	
21			Proper disposal of contaminated consumables and proper collection of non-consumables in the relevant places after delivery in 4-10 cases	
22			Establishing bonding and attachment between the newborn after delivery in 4-10	

			cases	
23			Provide comfort for patient and control the fourth stage (including hemorrhage control, checking uterine height and consistency, vital signs, patient's orientation every quarter to one hour) after delivery and correct registration and reporting it to the instructor / midwife in 4-10 cases.	
24			Provide complete postpartum education before transferring the mother to the postpartum ward (including self-care and personal hygiene, bathing, wound care, lucia, nutrition, hygiene in defecation, danger signs in the mother need Immediate referral, breastfeeding, fecal and urinary incontinence, vaccination, other neonatal care, neonatal symptoms, tests for screening for diseases leading to retardation, sexual intimacy and family planning, and return of menstruation and the possibility of re-pregnancy and the time and place of subsequent visits in 4-10 cases and consultation with a couple 1 case	
25			Observing abortion, curettage and cesarean section and helping the mother and baby after care	
26			Discharge of the mother and performing the necessary examinations and educate mother during discharge about caring herself and her child in 2 cases	
27			Participate in group discussion and study the theoretical topics	

List of student activities related to the Gynecology and infertility Practicum (Lesson code 54)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 24 days (4,30 hours daily)	Quality and considerations
1			Taking history and performing physical examinations in 55-50 cases	
2			Observation of genital tract examinations in 2 cases	
3			Performing genital examinations in 50 cases (including external and internal examinations)	
4			Observing breast examination in 2 cases	
5			Breast examination in 10 cases	
6			Placement of speculum in 50 cases	
7			Observation of cervical cell smears preparation in 2 cases	
8			Preparation of cervical smear in 15 cases	
9			interpreting the smear result in 5 cases	
10			Request the necessary tests in 25 cases	
11			Reading and interpreting test results in 15 cases	
12			Diagnosis of cervicitis and vaginitis in 25 cases	
13			Prescribing, treating and prescribing for the above 25 cases	
14			training 25 cases	
15			counseling in 2 cases	
16			Observation of gynecological surgeries in gynecological operating room 2-3 times a day	
17			Observation and follow-up of 3 infertility cases in infertility clinic (one day)	
18			Observation, examination and follow-up of breast tumors (half or 1 day)	
19			See 25 cases other than cervicitis and vaginitis	
20			Taking a history and performing examinations and prescriptions, requesting tests and following up on 25 cases other than services and vaginitis (within the same 50 cases we mentioned earlier) by mentioning the names of the cases so it will be clear for the instructor, has the student has trained which cases? Sexually Transmitted Infections, Urinary	

			Tract Infection, Urinary Incontinence, PID, Mole and GTN, Ectopic Pregnancy, Cancers, Cysts and Ovarian Masses, Myoma, Abnormal Diseases, Dysmenorrhea, PMS, Abnormal Bleeding, Amenorrhea, Infertility, ...)	
21			Preparation of wet smear in 15 cases	
22			observing and diagnosing a wet smear under a microscope 15 cases	
23			Perform and interpret Fren test in 2 cases	
24			Perform PCT and observe it under a microscope in 1 case	
25			Observation and assistance in hysterosalpingography, hysteroscopy, colposcopy, laparoscopy, cochlear implantation, dilatation and cervical curettage and endometrium 1 case each	
26			Preparation of culture from vaginal secretions 1 case	
27			Educate the patient in 25 cases in different cases	
28			Familiarity with the diagnosis, management and treatment, care and follow-up of patients admitted to the gynecology department for 2 days (at least 6 different cases)	
29			Breast examination training to the patient	
30			spermogram test 2 cases	
31			Interpretation of semen analysis test result 1 case	
32			Participating in discussions and study theoretical topics	

List of student activities related to the Maternal, child, and reproductive health, and family planning Practicum (course code 48)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 24days (4.5 hours daily)	Quality and considerations
			Family planning:	
1			Creating a file for new clients 4 cases	
2			Physical examination of clients	
3			Cervical pap smear 10-5 cases	
4			Read the pap smear answer and interpret it 2 cases	
5			Observe 1 family planning consultation	
6			Do other consultations 2 cases	
7			Providing a variety of appropriate family planning methods to clients, including oral contraception pills, condoms, ampoules, IUDs, etc., each of at least 5 cases by performing examinations and requesting the necessary tests in each case.	
8			Inserting IUD 4-2 cases	
9			Removing IUD one case	
10			Individual or group training and management of family planning classes at least one case	
11			Prepare an educational pamphlet, booklet or poster in family planning 1 case	
			Vaccination department:	
12			Use of cold chain in the use of vaccines	
13			Applying aseptic principles when vaccinating	
14			Using the correct method of prescribing and injecting different types of vaccines	
15			Prescribing injections of 12-18 vaccines for children from each type	

			of vaccine 2 -3 cases	
16			Prescribing tetanus vaccine for pregnant women 2 cases	
17			Vaccination scheduling based on intervals and type of vaccine for a child who has started his or her vaccination schedule correctly and on time 2 cases	
18			Vaccination scheduling based on intervals and type of vaccine for a child who has not started his or her vaccination schedule correctly and on time 2 cases	
19			Identify contraindications to vaccination	
20			Diagnosis and correct implementation of the difference between the dose and type of vaccine in children and adults	
			Child care department under 5 years:	
21			File formation for new clients 3 cases	
22			Weighing and measuring the height and head circumference of children correctly 10 cases	
23			Draw the growth curve correctly on a special card for 10 cases	
24			Planning visitation intervals for growth monitoring for 10 children	
25			Diagnosing deviations from proper growth and following up the cause by conducting an interview with the mother and giving the necessary recommendations and possibly the necessary referral to a doctor in 2 cases	
26			Teaching proper breastfeeding to the mother 3 cases	
27			Complementary nutrition education 2 cases up to one year old 2 cases up to two years old	
28			Training on bottle-feeding in 1 case	
29			Teaching proper nutrition to children over 2 years old	
30			Diagnosis, perform care program and education in 1 case of diarrhea, 1 case of respiratory disease, 1 case of	

			thrush, 1 case of hypoglycemia and 1 case of fever	
			Pregnant mother care department:	
31			Creating a file for new clients 2 cases	
32			Measurement of height, weight and blood pressure 5 cases	
33			Physical examinations and Leopold maneuver 5 cases	
34			Fetal heart rate control and maternal vital signs 5 cases	
35			Request for routine pregnancy tests 5 cases	
36			Educating the mother about self-care in various subjects: nutrition, sleep, rest and personal health and sexual relations, danger signs, pregnancy exercises and ... or postpartum education 2 cases	
37			Conducting group training for pregnant mothers 1-2 cases related to pregnancy and postpartum training	
38			Attention and examination about oral and teeth health of pregnant women and referral to the dentist in necessary cases 2 cases	
39			Guidance on tetanus vaccination 2 cases	
40			Breast examination and check it to prepare for breastfeeding 1 case	
41			Screening high-risk mothers and referral to a specialist doctor or hospital 1-2 cases	
42			Request for ultrasound 1-2 cases	
43			Diagnosis of high-risk pregnancies, risk training, referral h cases and follow-up	
44			Planning for reference intervals in 5 cases	
45			Participate in questions and answers and study theoretical topics	

List of student activities related to the Normal and Abnormal Delivery Internship (course code 76,77)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 52days (10 hours daily)	Quality and considerations
			Note: Half to two thirds of the following should be in cases such as diabetes, preeclampsia, premature rupture of the membranes, placenta previa and placenta abruptio, postdate / post term, cardiac diseases, twin, breech, dead fetus, IUGR, preterm delivery, vacuum, etc. and name of each specific case should be recorded in the summary that the student writes for each individual to later determine if each student has been trained in all cases. How many cases has the student **?**done	
1			Getting a history, physical examination of Leopold Getting vital signs 50 cases	
2			FHR control of at least 120 cases (as much as necessary for labor control) including finding the right place, controlling fetal pulse with maternal pulse, full 1-minute control, necessary control immediately after contraction, counting and recording and using internal and external monitoring	
3			Vaginal exam: dilatation, effusion, station, water bag position, cervical position, bladder position and to some extent pelvic examination (30-50 times)	
4			Necessary examination and decision to hospitalize labor in 8 cases	
5			Preparing the hospitalized mother	

			for the labor (clothing, bed, recommending to empty the bladder, taking blood vessels and serum attachment, if necessary, blood sampling and necessary explanations to the center) 30 cases	
6			Complete management and control of labor (including control of heart sound, control of uterine contractions, nutrition, position, communication, trust, training and emotional support of childbirth, vaginal examination, attention to bladder emptying, pain relief, using various non-pharmacological methods. In the required cases, answering the questions of the mother, etc.) 40-45 cases, each case for at least 3 hours, of which 6-8 cases are induction	
7			Perform amniotomy with all the necessary conditions 5 cases	
8			Diagnosis of delivery time and timely transfer of labor to delivery room 10-20cases	
9			Wearing the right gloves and scrub and using the equipment correctly and opening the pack correctly and providing the necessary equipment by applying the correct principles of sterility 10-20 cases	
10			Proper performance of peripheral and perineal drop 10-20 cases	
11			Performing correct episiotomy anesthesia 10 cases of podendal anesthesia 1 case and assistance with epidural anesthesia 1 case	
12			Diagnosis of the need for episiotomy 10 cases	
13			Episiotomy repair 10 cases	
14			Rupture repair 3 cases	
15			See 5 other cases he/ she has not	

			seen before	
16			Observe and assist in delivery in 6-5 cases	
17			Full delivery 10-20 cases	
18			Monitoring the condition of the infant immediately after delivery (opening the airway, preventing hypothermia, stimulating breathing to improve and giving Apgar minutes 1 and 5 minutes) 30-30 cases	
19			Umbilical cord clamp and physical examination of the baby, injection of vitamin K and supervision of the bracelet and taking the effect of the baby's foot 35-30 cases	
20			Assistance in repairing an episiotomy or rupture of 3 cases with the necessary attention and care before, during and after the repair (about a classmate)	
21			Proper delivery of the placenta, complete examination of 10-20 cases	
22			Manual removal of the placenta and intrauterine examination in the fourth stage 1 case	
23			Proper disposal of contaminated consumables and proper collection of non-consumable cases in the relevant places after delivery 10-20 cases	
24			Establishing bounding and attachment between the newborn after delivery 35-30 cases	
25			Establishing maternity comfort condition and performing fourth stage controls (including bleeding control, uterine height and consistency, vital signs, delivery awareness every hour to 1 hour) after delivery and correct registration and reporting it to the instructor / midwife of 10-20 cases.	
26			Provide complete postpartum education to the postpartum ward (including self-care and personal	

			hygiene, bathing, wound care, lucia, nutrition, hygiene in urinary defecation, danger signs in maternity, urgent referral, breastfeeding, vaccination, defecation, other feces) Neonatal symptoms, tests for screening for diseases leading to neonatal retardation, sexual intimacy and family planning and relapse, as well as the possibility of re-pregnancy and the time and place of subsequent visits) in 30-30 cases, 1 case of postpartum counseling	
27			Observing abortion, curettage and cesarean section and assisting in maternal and infant care after 1-2 cases	
28			Discharge of the mother by performing examinations and giving the necessary training during discharge about herself and the baby 4 normal cases and 2-3 cases	
29			Participate in questions and answers and study theoretical topics determined by the instructor	

List of student activities related to the Normal and Abnormal Pregnancy Internship (course code 75)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 32days (4.5 hours daily)	Quality and considerations
1			Get a history and psycho-social evaluation and Physical and performing examinations and care and requesting tests in 25-30 cases of pregnant women with internal diseases and surgery (2-3 cases of heart disease, 2-3 cases of diabetic pregnancy, 2-3 cases of eclampsia, 2-3 cases of urinary tract infection, 2-3 cases of urinary tract infection, 2-3 cases of urinary tract infection) Hepatitis, etc., 2-3 cases of preterm and term skin, 2-3 cases of negative seizures, 2-3 cases of thyroid disease, 2-3 cases of other diseases such as respiratory, epilepsy, IUGR, etc.	
2			Taking a history and psycho-social and physical evaluation in 60-55 normal pregnant women (without complications) with the necessary training and complete care (approximately 1.3 in the first trimester, 1.3 in the second trimester and 1.3 in the third trimester)	
3			Physical examination of various organs of the mother's body and neurological systems in about 80 cases (including conjunctiva, thyroid, heart, lung, breast, leopard, limbs, etc.	
4			Prepare an educational pamphlet or poster (individual or group)	
5			File and request routine or necessary tests during pregnancy in 40 cases	
6			Prescribing licensed drugs during pregnancy in 50 cases and giving 30 cases of education and 3 consultations	

7			Request for 3-3 cases of complete examination and urination in case of emergency and need	
8			Perform 5-10 cases of ultrasound and other fetal health tests and 30 cases of interpretation and guidance according to their results	
9			Perform 1-2 cases of NST2-1 case of rollover test and 1-2 cases of indirect coombs	
10			Doing pregnancy counseling with a couple 2 cases	
11			Heart rate hearing with Pinard 20 and Doppler 50	
12			Interpretation of correct guidance based on test results in 50 cases	
13			Office of Pregnancy Training Classes 3 cases	
14			Participate in questions and answers and study theoretical topics determined by the instructor	

List of student activities related to the Gynaecology and infertility Internship (course code 78)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 21days (5 hours daily)	Quality and considerations
1			Take a history and perform physical examinations in 50-55 cases	
2			Performing genital examinations in 50 cases (including external and internal examinations)	
3			Breast examination in 10 cases	
4			Placement of speculum in 50cases	
5			Preparation of cervical smear in 15 cases	
6			Reading and interpreting the smear result in 5 cases	
7			Reading and interpreting test results in 20 cases	
8			Requesting tests 25 cases	
9			Diagnosis of cervicitis and vaginitis in 30 cases	
10			Prescribe treatment and write a prescription for the above 30 cases	
11			instructing in 20 cases	
12			Perform counseling in 2 cases	
13			Observation of gynecological surgeries in gynecological operating room 2-3 times a day	
14			Observation and follow-up of 5 infertility cases in infertility clinic (one day)	
15			Observation, examination and follow-up of breast tumors (half a day or a day)	
16			See 35 cases other than cervicitis and vaginitis	
17			Taking a history and performing examinations and prescriptions and requesting tests and necessary follow-up in 35 cases other than cervicitis and vaginitis (within the	

			same 60 cases that we mentioned at the beginning) by mentioning the cases, so the cases will be clear for the instructor including sexually transmitted diseases, urinary tract infections, urinary incontinence, PID, mole and GTN, ectopic pregnancy, cancers, cysts and ovarian masses, myomas, breast diseases, dysmenorrhea, PMS, abnormal bleeding, amenorrhea, Infertility, menopausal problems, hirsutism	
18			Observation and follow-up of 5 infertility cases in infertility clinic (one day)	
19			Preparation of Pap smear, LBC and wet smear in 15 cases	
20			Seeing a wet smear under a microscope detects it in the above 15 cases	
21			Perform and interpret Fern test in 2 cases	
22			Perform PCT and observe it under a microscope in 1 case	
23			Assistance in performing hysterosalpingography, hysteroscopy, colposcopy, laparoscopy, cochlear implant, dilatation and cervical cortex and endometrium, 1 case each	
24			Preparation of culture from vaginal secretions 1 case	
25			Educate the patient in 25 cases in different cases	
26			Familiarity with how to diagnose, manage and treat, care and follow up patients who are hospitalized in gynecology surgery for 2 days (at least 6 different cases)	
27			Breast examination training to the patient in half a day	
28			Interpretation of semen analysis test result 1 case	
29			Participate in questions and answers and study theoretical topics	

List of student activities related to the Practicum in Maternal, child, and reproductive health, and family planning Internship (course code 79)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 12 days (4.5 hours daily) 2days out of 12 days must be in the operating room	Quality and considerations
			Family planning:	
1			Making the medical record for new clients 6 cases	
2			Perform cervical smear (4 cases)	
3			Read the smear answer and interpret it 4 cases	
4			Family planning consultation (2 cases) , other types of consultations (3 cases)	
5			Changing the method of family planning by doing the necessary counseling (1 case)	
6			Providing a variety of appropriate family planning methods to clients, including oral pills, condoms, ampoules, IUDs, etc. by performing examinations and requesting the necessary tests in each case(each of at least 5 cases)	
7			IUD insertion (8-6 cases)	
8			Remove the IUD(1 case)	
9			Individual or group education and administration of family planning (at least 2 cases)	
10			Preparation of pamphlets, booklets or educational posters in different parts of the internship	
			Vaccination section:	
11			apply the cold chain at the time of vaccination	
12			Applying aseptic principles at the time of vaccination	
13			Using the correct method of prescribing and injecting different types of vaccines	

14			Prescribing and injecting 18 vaccines for children out of 3 vaccines	
15			Prescribing tetanus vaccine for pregnant women (2 cases)	
16			Vaccination scheduling based on intervals and type of vaccine for a child who has started the vaccination	
17			Vaccination scheduling based on intervals and type of vaccine for a child who has not started his or her vaccination (2cases)	
18			Identify contraindications to the vaccination	
19			Diagnosis and correct implementation of differences vaccine in children and adults	
			under 5 Child related care section years:	
20			making the medical record for new clients(3 cases)	
21			Weighing and measuring height and head circumference of children correctly (10 cases)	
22			Draw the growth curve of child correctly on a special card for 10 cases	
23			Planning visitation intervals for growth monitoring for 10 children	
24			Diagnosing any deviations from proper growth and following up the cause by conducting an interview with the mother, giving the necessary recommendations and possibly the necessary referral to a doctor in 2 cases	
25			proper breastfeeding education to the mother (3 cases)	
26			Complementary nutrition education (2 cases) from beginning up to one year old) and up to two years old (2 cases	
27			Education of Breastfeeding (1 case)	
28			Teaching proper nutrition to children over 2 years old	

29			Diagnosis, care and education (1case of diarrhea 1 in respiratory disease, 1 case of in thrush, 1 in hypoglycemia and 1 in fever)	
			section of Maternity Care:	
30			making the medical record for new clients (2 cases)	
31			Measurement of height, weight and blood pressure (5 cases)	
32			Performing physical examinations and Leopold maneuver (5 cases)	
33			Fetal heart sound control and maternal vital signs (5 cases)	
34			Request for routine pregnancy tests 5 cases	
35			Educate the pregnant mother about self-care in various subjects: nutrition, sleep, rest and personal health and sexual relations, danger signs, exercises, pregnancy exercises, etc. 2	
36			Conducting group training for pregnant mothers with topics related to pregnancy education(1-2 cases)	
37			Attention and examination about oral health of pregnant women and referral to the dentist in necessary cases (2 cases)	
38			Tips on tetanus vaccination(2 cases)	
39			Breast examination and examination to prepare for breastfeeding (1 case)	
40			Screening of high-risk mothers and referring them to a specialist doctor or hospital (1-2 cases)	
41			Request of sonography (2-1 cases)	
42			Diagnosis of high-risk pregnancies, client education , doing special referring and	

			follow-up	
43			Planning for visit intervals in 5 cases	
			Other cases:	
44			Adolescent health education and counseling (1 case)	
45			education and counseling of menopause related issues 1 case	
46			Marriage education and counseling (2-1 cases)	
47			Sexual function education and counseling (1 case)	
48			Training of health liaisons in 1 related subject	
			Community health section (rural city): includes 4 days in the city and 4 days in the village	
49			Providing an educational class in a girls' school (1 case)	
50			Providing an educational class for women with specific needs in a determined center a subject (1 case)	
51			Visiting a factory or the place where women work - providing them the necessary health education-(1 case)	
52			Visit and provide maternal and child health services in the rural health center	
53			Visiting the headquarter center in the health network and familiarity with the work of collecting health information and monitoring the Vital Horoscope preparation center and its interpretation by the student	
54			Providing educational classes in the mosque for women	
55			Visit a center for the elderly and women with disabilities and provide training for them	

56			Visiting homes in the city and villages with the help of liaisons or health workers	
57			Kindergarten visits and pre-school education on child health issues	
58			Carrying out a project to solve or management a health problem (1 case that (mentioned in the contents)	
59			In addition to any other community health program that is .relevant to the area of study	
60			Participate in questions and answers and study theoretical topics determined by the instructor	

List of student activities related to the Management and its application in midwifery Practicum/Internship (course code 82)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 9 days (6 hours daily)	Quality and considerations
1			**A: Preparation of a written project about the structure or clinic related to midwifery work:** 1 -Physical structure in the form of a sketch 2 -Preparing a list of medical and non-medical devices 3 -Status of hospitalized patients in terms of: medical diagnoses, care needs, educational needs 4 -Average number of patients admitted, admitted and discharged 5 -Section routines including: How to accept patients How to discharge patients How to write reports and - examinations and tests How to educate the patient How to implement care and treatment processes Arrangement of file sheets How to do consultations - How to request tests How to check the doctor's instructions How to complete the cardex How to enter information into - the computer Preparing a list of names of -6 doctors, residents, interns And nursing and midwifery students, etc. and the days of their presence 7 -Preparing a list of commonly	

			used drugs in the ward and their care and prescribing tips 8 -Preparing a list of tools and equipment available in the section code trailer and its available drugs 9 -Preparing a list of diagnostic methods (Tests), how to perform them and necessary preparations for patients (to perform them) 10 -Preparing a list of names of nursing and midwifery staff and other staff and the number of each of them in each work shift 11 -Awareness of the protection and security systems of the sector and its control 12 -Awareness of the methods of dividing human resources in the sector 13 -Preparing a list of technical and installation problems **B: Presenting the above written report and fixing its problems**	
2			**A: Designing a problem-solving process, in case of one of the existing problems of the department as:** 1- Expressing the problem clearly 2- Explaining the reasons for the formation of the problem 3- Determining measurable goals (with measurable criteria) 4- Providing possible solutions 5- Selecting the best solution according to the conditions and facilities available in the section **B: The daily division of human resources and nursing and midwifery students according to its principles** 1- For nursing and midwifery students in coordination with the relevant instructor and Head of Department 2- For the relevant nursing and	

			midwifery staff in coordination with the Head Department 3- Installing it on the bulletin board or registering it in a special office	
3			**A: Execution of the problem solving process (based on the best solution selected in the second week)**	
4			**B: Providing a standard of care based on the education of the department (in the form of educational pamphlets, educational posters, etc.)**	
5			**A: Implement the principles of taking over the ward through:** 1- Attending the ward on time 2- Going to the bed of patients 3- Paying attention to all written and oral reports of the head of the ward about patients 4- Paying attention to the equipment and drugs delivered in each shift	
6			**D: Implement the principles of section delivery** **via:** 1- Delivery of patients t 2-Delivery of special tools, medicines and equipment 3- Registration of all reports related to patients according to the correct principles of reporting	
7			**E: Active participation in the visit of doctors and other members of the health and treatment team through:** 1- Accompanying the doctor or other team members in the clinic 2- Checking the doctor's instructions according to the relevant principles 3- Entering commands in the card, medicine cards and computer 4-Performing appropriate actions	

			following orders (including following up on consultations, requests, etc.)	
8			**F: Control and supervision of the affairs of the ward through:** 1- Frequent and purposeful rounds in the department and gaining knowledge about: 2- Activities of other team members, including: Doctors, nurses, midwives and students	
9			**F: Calculating the number of required manpower (professional and non-professional) and the number of each of them in each shift**	
10			**G: Preparing the patient's nutritional list and controlling and supervising its proper implementation**	
11			**H: Preparation of daily statistics of patients**	
12			**I: Preparation of various requests, including:** **Tests, warehouse equipment, .etc**	
13			**J: Anticipation of all equipment and drugs needed for other shifts in the morning shift or before the holidays**	
14			**K: Controlling the presence of students in the ward and submitting the necessary report to the instructor or head of the ward**	
15			**L: Active participation in the clinical rounds of supervisors through:** 1- Visiting the physical environment of the ward, equipment and facilities 2- Investigating the performance of nursing and midwifery staff and their communication 3- Investigating how to record	

			information and reports 4- Studying the clinical condition of patients and providing services to them 5- Preparing a list of errors in each of the above cases 6- Providing appropriate reminders to the department officials 7 -Follow-up to eliminate the mentioned problems	
16			**M:** Proper cooperation with the staff of the department with the necessary conditions	
17			**A**: Problem solving (in the form of evaluating the achievement of set goals)	
18			**B:** Designing a monthly staff shift schedule	
19			**C:** Assessing the status of provided care to patients, especially critically ill patients	
20			D: Carrying out activities related to the guidance of students and human resources of the ward	
21			**E:** Establishing appropriate and effective communication with doctors, midwives, nurses, students, patients, patient companions, service personnel and other parts of the hospital	
22			**F:** Performing activities to control infection in the ward (according to the available facilities and conditions) through: 1- Providing practical suggestions for infection control 2- Implementing educational programs to control the infection) For staff and students(	
23			Participate in questions and answers and study theoretical topics determined by the instructor	

List of student activities related to the Radiology, Sonology and Electrology in Obstetrics and Gynecology Practicum/Internship (course code 83)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 9 days (6 hours daily)	Quality and considerations
1			observe and interpret simple radiographs of the pelvis	
2			Observe and interpret radiographs of the pelvis and uterus with radiocontrast agent	
3			Recognize high quality radiological images from a low one	
4			observe different sections of radiology devices	
5			visit different sections and how to do radiotherapy	
6			Fetal auscultation with sonicaid (Doppler)	
7			Observe different parts of the monitoring device	
8			Installing and replacing paper, preparing the monitoring device	
9			monitoring using the relevant device	
10			observe different parts of ultrasound devices	
11			Finding the uterus, bladder and ovaries of women (pregnant and non-pregnant) as well as the head, chest, abdomen, limbs, fetuses and placenta on ultrasound	
12			Measurement of biparietal diameter, femoral length, head circumference and abdominal circumference using sonography	
13			Interpretation of ultrasound images of pregnant and non-pregnant uterus and fetus and placenta	
14			Observation of biophysical profile testing for fetus	

15			Observing different parts of electrocautery and freezing devices (crayo)	
16			Perform or observe an electrocautery and freeze the cervix	
17			observe different parts of the laser device and how it works	
18			observe a variety of heating and cooling devices and methods to relieve pain	
19			Observe different types and sections of TENS devices	
20			Use of the TENS device at least once, especially to relieve the pain of dysmenorrhea, labor pain and urinary incontinence	
21			Giving exercises to relieve back pain, especially in the neck, back and pelvis, as well as knee pain to patients (pregnant or postpartum)	
22			Giving exercises during pregnancy	
23			Giving exercises after childbirth and giving Kegel exercises	
24			Observe and perform various types of massage therapy to relieve pain and for relaxation	
25			Participate in questions and answers and study theoretical topics	

List of student activities related to the Neonates who need intensive care Internship (course code 80)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 9 days (6 hours daily)	Quality and considerations
1			physical examination of term infants involve s: examination of head and neck and fontanelles, face, chest, heart, abdomen, spine, color, pelvic joint, Babinski test, genital tract, fetal age tests, reflexes and nerve tests(10 cases)	
2			education for breastfeeding(2 cases)	
3			Perform 1 case Lavage By inserting a catheter	
4			Perform the gavage by inserting a gastric catheter (1 case)	
5			Anthropometric and weight measurements (2 cases)	
6			High risk baby care (RDS or jaundice)	
7			Ability to work with ambo bag and laryngoscope (1 observation 1 case of neonatal CPR	
8			Premature baby care in 1 case	
9			Baby care in the incubator (2 cases)	
10			Caring for a baby with a disease and a complication(2 cases)	
11			Calculation of medication and execution of doctor's prescription in 3 cases	
12			intravenous feeding and electrolytes (3 cases)	
13			Blood sampling from a vein or sole of the foot (3 cases)	
14			One case of consultation if possible	
15			Teaching the mother about how to	

			give medicine and feed the baby (1 case)	
16			Performing neonatal examination at the time of discharge 1 case	
17			Working with pulse oximeter and ventilator devices, 1 case each	
18			Training on vaccination, nutrition and care of the infant, growth of the baby, urine and feces ,crying of the baby, change of clothes and diaper, newborn danger signs, necessary tests, umbilical cord care, fever and seizures, etc	
19			Preparation of an educational pamphlet (individual or group)	
20			Familiarity with the process of CPR of the baby and performing it on the model (1 case observation or helping for CPR if possible)	
21			work with incubator (1 case)	
22			phototherapy device (1 case)	
23			observe and help a blood transfusion(1 case)	
24			Caring and working in the ICU for 3-6 days	

List of student activities related to the Medical and surgical diseases in pregnancy Internship (course code 81)

Student Name: Date: Internship Place: Instructor Name:

Row	Date of activity and, instructor's signature	Date of observation, signature of the instructor	Name of activities 9 days (6 hours daily)	Quality and considerations
1			Prepare an accurate history of 15 pregnant women with internal diseases and surgery	
2			Perform their complete physical examinations	
3			Diagnosis of abnormalities in history and examination	
4			Request the necessary tests as needed	
5			Analysis of abnormalities of important paraclinical trials	
6			Analysis and recognition of changes in important paraclinical tests in pregnancy and its interpretation	
7			Quickly obtain the required information from the patient's record	
8			Provide a correct and accurate report of the patient's condition to the instructor	
9			Diagnosis and observation, management and treatment of internal emergencies and surgery in pregnancy	
10			Diagnosis according to history and physical examination, request, interpretation of tests and paraclinics as well as observation and evaluation of their treatment along with necessary care, providing necessary training, identification of relevant drugs, etc., based on their importance in pregnancy (12 days including 12 internal cases	
11			Giving the necessary education to the mother	
12			Planning pregnancy care in the mothers till the end of pregnancy	

13			Perform a care process by each student	
14			Participate in questions and answers and study theoretical topics	

Appendix No. 1

Charter of Patients' Rights in Iran

1- It is the patient's right to receive desirable health services.

- Providing health services should:

1-1) be worthy of human dignity and respect for cultural values and religious beliefs.
2-1) be based on honesty, fairness, politeness and kindness.
3-1) be free from any discrimination, including ethnic, cultural, religious, type of disease and gender.
4-1) be based on current knowledge.
5-1) be based on the superiority of the patient's interests.
6-1) be regarding the distribution of health resources based on justice and patients' treatment priorities.
7-1) be based on the coordination of care elements including prevention, diagnosis, treatment and rehabilitation.
8-1) be with the provision of all basic and necessary welfare facilities and away from the imposition of pain and unnecessary restrictions.
9-1) be with paying special attention to the rights of vulnerable groups in society, including children, pregnant women, the elderly, the mentally ill, prisoners, the mentally and physically disabled, and the homeless.
10-1) be as soon as possible and with respect to time of patient.
11-1) be considering variables such as language, age and gender of service recipients.
12-1) in necessary and urgent care (emergency), regardless of its cost. In non-immediate (elective) cases, it is defined according to the criteria.
13-1) in necessary and urgent care (emergency), if it is not possible to provide appropriate services, it is obligatory to provide the necessary services and explanations, the patient must be transferred to the equipped unit.
14-1) in the final stages of life, when the status of the disease is irreversible and the death of the patient is imminent, a solution should be provided to maintain his comfort. Comfort means reducing the patient's pain and suffering, paying attention to the psychological, social, spiritual and emotional needs of him/her and his/her family at the time of mourning. The dying patient has the right to be with the person he/she wants in the last moments of his/her life.

2- Information should be provided to the patient in a desirable and sufficient manner.

1-2) The content of the information should include the following:
1-2-2) Provisions of the Charter of Patients' Rights at the time of admission.
2-1-2) Predictable criteria and costs of the hospital, including medical and non-medical services, and insurance criteria and introduction of support systems at the time of admission.
3-1-2) The name, responsibility and professional rank of the members of the medical department responsible for providing care, including physicians, nurses and students, and the relationship between their professions.
4-1-2) Diagnostic and therapeutic methods and the strengths and weaknesses of each method and its possible complications, diagnosis, prognosis and its complications, as well as all the information influencing the patient's decision-making process.
5-1-2) How to access the treating physician and the main members of the medical team during treatment.
6-1-2) All actions that have a research nature.
7-1-2) Provide the necessary training to continue treatment.
2-2) How to provide information should be as follows:
1-2-2) Information should be provided at the appropriate time and in accordance with the patient's condition, including anxiety and pain, and his or her personal characteristics, including language, education, and comprehension, unless:
-Delay in starting treatment by providing the above information will cause harm to the patient (in this case, the transfer of information after the necessary action should be done at the first appropriate time).
- The patient, despite being informed of the right to receive information, refuses to do so, in which case the patient's wishes must be respected, unless the patient's lack of information puts him or others at serious risk.
2-2-2) The patient can access all the information recorded in his clinical file and receive a picture of it and request the correction of errors in it.

3- The patient's right to freely choose and decide on receiving health services must be respected.

1-3) the scope of selection and decision-making is as follows:
1-1-3) Selection of the treating physician and the center providing health services within the framework of the criteria.
2-1-3) Selection and consultation of the second physician as a consultant.
3-1-3) Participation or non-participation in any research, with the assurance that his decision will not affect receiving health services.
4-1-3) Accepting or rejecting the proposed treatments after being aware of the possible side effects of accepting or rejecting it, except in cases of suicide or cases where refusing to treat another person is dangerous

5-1-3) recording the patient's previous opinion on future treatment measures when the patient has the ability to make decisions based on that when the patient isn’t capable of deciding, in accordance with legal standards, health care providers and decision-makers for the patient.
2-3) Selection and decision-making conditions include the following:
1-2-3) the patient's choice and decision-making should be free and informed, based on receiving sufficient and comprehensive information * mentioned in paragraph 2).
2-2-3) after providing information, the patient should be given the necessary and sufficient time to make a decision and selection.

4- The provision of health services should be based on respect for the patient's privacy (right to privacy) and observance of the principle of confidentiality.

1-4) it is mandatory to observe the principle of confidentiality regarding all information related to the patient, except in cases where the law has excluded it.
2-4) the patient's privacy must be respected in all stages of care, both diagnostic and therapeutic. For this purpose, it is necessary to provide all the necessary facilities to ensure the privacy of the patient.
3-4) only patients, group therapy, authorized persons authorized by the patient, and persons who are considered authorized by law can access information of the patient.
4-4) the patient has the right to have his trusted person with him in the diagnostic stages, including examinations. One of the child's parents can accompany in all stages of treatment which is the child's right, unless it is contrary to medical necessity.

5. Access to an efficient compliant response system is the patient's right.

1-5) every patient has the right to complain to the competent authorities in case of alleged violation of his rights which is the subject of this charter, without disturbing the quality of receiving health services.
2-5) Patients have the right to be informed about the procedure and the results of their complaint.
3-5) Damage caused by the error of health care providers should be compensated in the shortest possible time after consideration and proof in accordance with the regulations.

In the implementation of the provisions of this charter, if the patient does not have the capacity to make decisions for any reason, the exercise of all the rights of the patient - mentioned in this charter - will be the responsibility of the substitute legal decision maker. Of course, if the alternative decision-maker obstructs the patient's treatment against the physician's opinion, the physician can appeal the decision through the relevant authorities.
If a patient who does not have the ability to make a decision but can make a reasonable decision as part of the treatment process, his or her decision should be respected.

Appendix No. 2

Regulations of dress code and professional ethics of students in laboratory-clinical environments

The dress code and behavior of all workers in the occupations of the medical department [2]* should be suitable for their profession and provides appropriate and effective professional relationship with patients, patients' companions, colleagues and others in educational settings.
Therefore, following guidelines is morally mandatory for everyone who is studying or providing services in clinical, laboratory and educational settings.

Chapter One: Clothing and Covering
Students' clothing for entering educational environments, especially laboratory and clinics must be a uniform and include the following set of features:
1- Long white medical lab coat (knee-length and loose with long sleeves)
2- The coat must have the logo of the relevant University of Medical Sciences and Health Services.
3- All the buttons of the coat must be completely fastened during the whole period of presence in the educational environments.
4- It is mandatory to use a valid photo ID card containing (first letter of name, surname, title, faculty name and field name) on the cover, on the left chest during presence in educational environments.
5. Female students should cover the entire head, neck, under the neck and hair with a suitable cover.
6- Pants should be long, plain, and loose. Using ripped jeans and other fashionable items are not a suitable in medical environments.
7- It is necessary to wear simple socks that cover the whole leg and ankles.
8- It is forbidden to wear lace socks or those with decorations.
9- Shoes should be comfortable and appropriate, there should not make noise while walking.
10- coat, clothes and shoes should be comfortable, clean, tidy and normal and should not have unusual bold colors.
11- It is forbidden to use signs and tags unrelated to the medical profession and it is forbidden to put them on coats, pants and shoes.
12- It is forbidden to use and expose any rings, bracelets, necklaces and earrings (except wedding rings in educational environments).
13- It is forbidden to use slippers and sandals in educational environments except the operating room

Chapter 2: Personal hygiene and makeup standards in the country's educational environments
1- Medical affiliates are role models of personal hygiene, therefore, clean appearance and hygienic behavior in medical educational environments is essential.
2- Nails should be short and clean. Nail decoration with nail polish and nail stickers in any shape is prohibited. The use of artificial nails and long nails increases the chance of transmitting the infection and the possibility of injury to others and medical equipment.
3- Unconventional make-up of the head and face is not appropriate for the practice of the medical professions.
4- It is forbidden to show any makeup tattoo, a ring or a jewelry on the nose or any part of the hands and face.
5 - colognes and perfumes with a pungent odor and allergens are prohibited in educational settings.

Chapter 3: Criteria of students' behavior in medical education environments
1- Observance of the principles of professional ethics, modesty in dealing with patients, patients' companions, professors, learners and staff is mandatory.
2- Speaking in educational environments should be calm and polite. And it is forbidden to make loud noises or utter words that are not suitable in the medical profession.
3- Smoking is prohibited at all times when a person is in educational environments.
4- Chewing gum in laboratories, conference halls, patient rounds and in the presence of professors, staff and patients are prohibited.
5 - When attending classes, laboratories and rounds of patients, the cell phone should be turned off and at other times, using it should be reduced as necessary.
6- Any discussions and jokes in the public such as elevators, coffee shops and restaurants are prohibited.

[2] The medical group refers to those working in medicine, dentistry, pharmacy, nursing, midwifery, rehabilitation, health, nutrition, paramedical, basic sciences and new technologies related to medical sciences.

Chapter 4: Supervising the implementation and follow-up of violations of the bylaws

1- Supervising the observance of the principles of this regulation in educational hospitals and other educational environments of clinical medical sciences is the responsibility of the deputy director of education of the hospital, group manager, head of department and educational and student experts of the relevant unit.

2- People who do not follow the professional ethics and principles of this regulation will be warned first and if they insist on committing a violation, they will be referred to the student disciplinary council.

Appendix No. 3
Rules for working with laboratory animals

Animals play a very important role in promoting and expanding medical research, and the ethical foundations and teachings of the divine religions dictate that we adhere to their rights. Accordingly, researchers should be required to observe the relevant ethical principles in their research on animals. For this reason, according to the approvals of the Publications Commission, it is necessary to mention the code of the Ethics Committee in research articles submitted to scientific journals. The following are the principles and rules for working with laboratory animals:

1- The storage space and building must have the necessary facilities for the health of the animals.

2- Before entering the animals, based on the type and species, the necessary conditions for keeping them should be provided.

3- Cages, floor walls and other building parts should be washed and disinfected.

4- Necessary conditions in terms of light, oxygen, humidity and temperature should be suitable in the closed space.

5. If kept outdoors, the animal must have a shelter.

6- The space and cage should be suitable for the animal species.

7- Cages must be suitable for the animal rest.

8- In transporting the animal, the conditions of temperature, light and breathing air should be provided from the place of purchase to the permanent place of the animal.

9- The vehicle transporting the animal must have suitable conditions and have the necessary license.

10- The health of the animal should be controlled by the person receiving it.

11- The quarantine of the newly arrived animal should be observed.

12- Animals should not be in the vicinity of their predatory animals.

13- Cages should be exposed to the view of a careful person.

14- It is not possible for the animal to escape from the cage.

15- Remove extra noises that cause annoyance to the animal from the environment.

16- There should not be possibility of injury to the animal due to movement.

17- The bed and resting place of the animal should be cleaned regularly.

18. The storage space should be regularly washed and disinfected.

19. Use standard disinfectants to clean the environment and sanitize work tools.

20- The food and water consumed by the animal should be suitable and hygienic.

21- Ventilation and discharge of waste should be done continuously so that there is no annoying odor and the possibility of allergen and disease transmission to staff, as well as laboratory animals.

22- There should be a suitable space for disposing of corpses of animals.

23. There should be sufficient, comfortable and hygienic space for administrative staff, technicians and caregivers.

24. Do not use sick or special animals such as in pregnancy and lactation in research.

25- Before any research, the necessary opportunity should be provided for the animal to adapt to the environment and people.

26. Employees must have been trained to work with animals.

Conditions for conducting research on animal

The selected species of animal should be suitable for testing and research.
The minimum number of animals required for statistical research accuracy should be used.
It is not possible to use optimal replacement programs instead of using the animal.
To be used in different stages of research and in the method of animal waste after research, minimal harassment.
Observe animal labor codes throughout the study.
The results should lead to improving the health of the community.