Gynaecology-obstetrics and paediatrics

**ECTS:** 25  
**Period:** Autumn semester 2016  
**Level:** Master’s degree  
**Academic semester:** 5th semester  
**Max. number of participants:** 210  
**Language of teaching:** English  
**Location:** Aarhus  
**Primary education:** Master Degree Programme in Medicine  
**Related education programmes:**  
**Department:** Department of Clinical Medicine  
**Course type:**  
**STADS UVA kode:** 321122U037

### Description of qualifications

**Objective**

During the semester the students will acquire knowledge of the most significant symptoms and diseases (most common or most serious) as well as causes of death from birth to death within the fields of gynaecology-obstetrics, paediatrics, clinical genetics, social medicine and forensic medicine. Students will acquire knowledge of the pathophysiological foundation, epidemiology, prevention, diagnosing, risk assessment, diagnostics, treatment, prognosis, relevant legal regulations and the importance of the role of the health professional in relation to important diseases within the specialities covered at the course. The interaction between the individual, family and society in relation to the development of the individual will be studied. The course emphasises public cross-sectorial collaboration as well as collaboration with the private sector to ensure optimal coherent patient pathways. Students will acquire knowledge of diagnostic radiology, clinical pharmacology, clinical immunology, pathology and clinical chemistry within the specialities covered during the course.

Throughout the course the students will acquire knowledge, skills and competences including the use of IT, preparing them for initiating their clinical basic training. It is the intention that all students will be actively included in the course and that the students take responsibility for their own learning.

The students will be motivated to thinking analytically and critically in order to stimulate lifelong learning. Emphasis is on strengthening the students’ awareness of their own personal responsibility, attitude and behaviour towards patients, colleagues and society.

**Learning outcome**

Theoretical as well as clinical practice will provide the students with competences, making them able to:

1. Describe the normal development of the child including the transition from foetus to infant and the implied conditions.
2. Describe important diseases within the scope of the course in relation to: Predisposition, genesis/origin, anatomical and physiological foundations, epidemiological conditions, symptomatology (common or serious symptoms) and prognosis.

3. Discuss a plan for diagnostic procedures related to the primary and secondary sector within the most significant conditions of the course; also prescribing and interpreting relevant biochemical, clinical immunological, diagnostic imaging, microbiological and patho-anatomical examinations.

4. Discuss diagnoses and differential diagnoses.

5. Describe treatment methods within the subjects of the course, including important image-guided techniques, and to mention indications, contraindications, side effects, complications and control regimens.

6. Use medicine on a rational basis including informing the patient or relatives about indications, relevant side effects, interactions, and to plan follow-up on treatment.

7. Discuss possibilities for prevention and screening in relation to diseases within the scope of the course.

8. Outline which diseases that can be diagnosed and treated in general practice, and which diseases that require referral to practising specialists or hospital.

9. Outline performance of relevant diagnostic imaging examinations and know advantages and limitations of the examinations as well as argue for a choice of diagnostic imaging modality, including outline of rational prioritisation of examinations based on symptoms and findings.

In more detail in relation to the different specialties:

10. Describe diagnostic imaging findings, both normal findings as well as the most important findings, within the scope of the course as well as outline the most important differential diagnoses related to image findings.

11. Discuss the appropriate patient pathway based on i.a. knowledge of collaborators in the social and health care sectors in connection with diseases affecting the functional ability temporarily or permanently.

12. Reflect on and describe possibilities to act within social medicine in regions and municipalities concerning persons with reduced physical or mental functional ability as well as socially vulnerable persons.

13. Describe possibilities for habilitation/rehabilitation including knowledge of the importance of the context (personal and environmental factors) for optimal relief of symptoms and of regaining optimal functional ability (function, activity, participation in social relations).

14. Know and apply the principles for relevant medication in pregnant and lactating women and for children. Furthermore, to know the concept of off-label use. The principles must be applied in practice during review of case.

15. Apply relevant parts of the medical legislation within the scope of teaching, including the legal position of the patient, termination of pregnancy and foetal reduction, blood transfusion, authorisation, patient complaints and damages, as well as adverse events in the health care system. Moreover, have knowledge of laws on adoption, insurance contracts, scientific ethics committees and the Danish Council of Ethics.

16. Discuss ethical problems in relation to the course and be aware of the importance of own professional role in communication, including the ability to show empathy.
17. Describe principles of genetic diagnosing, diagnostics, screening, risk assessment and counselling.
18. Describe traumatic lesions within forensic medicine and explain causes and mechanisms of these as well as assess level of seriousness and possible permanent injuries.
19. Describe and explain when a person is dead, causes of death and way of death, as well as describe and explain causes and mechanisms in toxic deaths and define death related to narcotics.
20. Describe and explain the principles of autopsy, identification, examinations at the location of death, forensic medical examination of a person and protection of biological marks/evidence.

Practical skills:
21. Make a sufficient and relevant anamnesis, including sufficient and relevant family anamnesis and outline this in a family tree.
22. Make a sufficient and relevant objective examination within the scope of the fields covered by the course.
23. Make a record with relevant description of anamnesis, family anamnesis and objective findings, conclusion, diagnostic considerations and suggestions for further plan of diagnostic procedures, treatment and rehabilitation/habilitation.
24. Master basic grips within gynaecology-obstetrics and paediatrics.
25. Communicate observations and findings, considerations on diagnosis and suggestions for a planned pathway for patients, relatives, collaborators and colleagues.
26. Summarize course of admission concerning the most common diseases including drafting of discharge summaries including expected course, further treatment, rehabilitation/habilitation, follow-up and counselling on possible referral from the general practitioner in the event of a new development in the patient’s course of disease.
27. Use information technology in relation to searching for knowledge within the scope of the course and in relation to teaching, which the students are supposed to do themselves under supervision during their clinical education and as participants in the course symposia.

Content
Gynaecology-obstetrics, paediatrics, clinical genetics, forensic medicine, social medicine, clinical pharmacology, general medicine, diagnostic radiology, clinical immunology, pathology and clinical chemistry.

Instructor
Course responsible: Ulla Breth Knudsen, Professor.

Lessons-weeks-periods
25 lessons on average/week
Recommended academic prerequisites
Passed 1. – 3. semester of the Master’s Degree Programme in Medicine at Aarhus University or equivalent is a prerequisite for participation in course 5.

It is recommended to take 4. semester before 5. semester (only AU students)

Teaching forms
Clinical practice, class-room teaching, lectures, self-studies, counselling

Comments to teaching forms
The course lasts 20 weeks with two weeks introduction, four weeks of gynaecology-obstetrics clinical practice, four weeks of paediatric clinical practice, eight weeks of theory and two weeks examinations. The clinical practice is conducted in four rotations alternating with theory. During the whole course, there will be education equivalent to one day each week during the weeks 3 to 18, regardless of whether the student is in a theoretical or clinical period.

Introduction
There will be 52 introductory classes during the first two weeks for all participants.

Clinical practice at departments of gynaecology-obstetrics and paediatrics, including bedside teaching and case-based presentations and discussions
Students have 2 x 4 weeks of mandatory clinical practice at departments of gynaecology-obstetrics and paediatrics. There are four rotations of clinical practice.

An approved education programme will be made for each department. The clinical associate professor is responsible for the student’s stay and approves this, based on criteria in the education programme and the log book. Each student has a junior hospital doctor assigned as a clinical counsellor; the clinical counsellor will contribute to a fruitful stay for the student and will be the sounding board for the student during the clinical stay at the department. A work plan is made for the students, to ensure their participation in department activities and performance of tasks related to both day and shift work. The department expects the student to show up and student attendance is compulsory. Students are expected to participate in clinical work a minimum of 30 hours per week, preferably more. During the clinical stay, the clinical associate professors and instructors at the individual departments will arrange 2-hour bedside teachings and 4-hour clinical examination sessions.

Theoretical part
The theoretical part of the course stretches over a period of eight weeks and is repeated in two rotations. A total of 16 lessons with interdisciplinary symposia are held within all the subjects of the course as well as class-room teaching in clinical genetics, forensic medicine, social medicine and radiology equivalent to 42 lessons. During the theoretical part of the course, the students are offered a 1-day visit to a department of clinical genetics.

Joint theoretical education
One day per week there is joint theoretical education in Aarhus. A lecture and student-involved teaching for 80 lessons, five lessons/week during 16 weeks are held. The systematic lectures will go through the theoretical part of the curriculum across all course subjects.

**Overview of course teaching and working methods**

The course is assigned 25 ECTS points and the students can expect to have a workload of approximately 750 hours during the semester distributed as follows:

- **Introductory classes** 26 lessons / week for two weeks; total 52 lessons

- **Gynaecology-obstetrics clinical practice**
  - a. Daily clinical practice, including shifts 24 hours/week for four weeks; total 96 hours
  - b. Bedside two hours/weeks for four weeks; total eight hours
  - c. Clinical case-based presentations and discussions four hours/weeks for four weeks; total 16 hours

  - Total 120 hours

- **Paediatric clinical practice**
  - a. Daily clinical practice, including shifts 24 hours/week for four weeks; total 96 hours
  - b. Bedside two hours/weeks for four weeks; total eight hours
  - c. Clinical examination sessions four hours/weeks for four weeks; total 16 hours

  - Total 120 hours

- **Interdisciplinary symposia** two lessons/week for eight weeks; total 16 lessons

- **Class-room teaching**
  - a. Clinical genetics two lessons/weeks for seven weeks; total 14 lessons
  - b. Forensic medicine – two lessons/weeks for six weeks; total 12 lessons.
  - c. Radiology one lesson/week every second week; total 4 lessons
  - d. Social medicine two lessons/weeks for six weeks; total 12 lessons.

  - Total 42 lessons

- **Visit to department of clinical genetics** eight hours (voluntary)
- Systematic lectures/student-involved teaching five lessons/weeks for 16 weeks; total 82 lessons
  Participation in course examination 4.5 hours
- Self-studies 313.5 hours

*Total course workload 750 hours*

**Examination**

**Practical information**

*Censorship*: internal co-examination

*Assessment*: 7-point grading scale

*Notes*: 2.5 hours practical clinical OSCE test (with 11-15 stations) and 2-hour written MCQ. No aids allowed for the OSCE test (apart from those made available during the test); all aids are allowed for the MCQ test. The OSCE test and the MCQ each account for 50% in the assessment of the grade. Both clinical and theoretical education based on attendance and explicit criteria in the education programme and the log book must be approved in order to register for the examination.

*Aids*: See description above.

**Literature**

When deciding on the curriculum, a decision has been made not to be bound by one specific textbook.

The master degree programme is the start of lifelong learning of clinical skills. At the examination there is broad access to knowledge resources. Preparation for the examination should thus focus on general and clinical skills. It is likely that students need different text books; below are listed recommended suggestions. Often one of the textbooks will be adequate, but the curriculum covers diseases and symptom complexities. Remember that it can be valuable to read the guidelines at the specific departments at [guidelines/retningslinjer/instrukser/e-dok](#). Moreover, [UpToDate](#) is a comprehensive reference work, basically covering the entire medical profession; this work is updated every four months.

**Paediatrics**

Danish literature:

- Praktisk Pædiatri, 2006; Schiøtz & Skovby, 2. udgave, Munksgaard.

English literature:


**Gynaecology/obstetrics**
Danish literature:

- Obstetrisk, red N. Uldbjerg, P. Damm, J. S. Jørgensen. 3.udgave, Munksgaard, 2014
- Gynækologi, red A. Forman, B. Ottesen, O. Mogensen. 4.udgave, Munksgaard 2011.
- Kompendium FADLs forlag.

English literature:


Clinical genetics

Danish literature:

- Medicinsk Genetik. Søren Nørby og Peter KA Jensen, 2. udgave, FADLs forlag

English literature:

- Medical Genetics. Jorde, Carey, Bamshad, 4 ed, Mosby

Forensic medicine

- Nordisk Lærebog i retsmedicin, Jørgen Lange Thomsen. 3. udgave, 2013

English literature:


Social Medicine

- Klinisk socialmedicin og Rehabilitering FADLs forlag 1. udg. 2011.
- www.Lægehaandbogen.dk
**General medicine**

Danish literature:

- Almen Medicin, 1 udgave, Munksgaard
- www.Laegehaandbogen.dk

English literature:


**Pharmacology:**


**Curriculum**

List of diseases and further information will appear on Blackboard

**Academic regulations**

**Limits in participants**

210

**Place of the master curriculum**

5. semester

**Language:** English; at the OSCE test the students can choose whether examination at the station should be in Danish or English. All written examination material is available in English only.