

# Opasraportti

## Courses in English for exchange student, Medicine (2015 - 2016)

This Course Catalogue lists courses taught in English for exchange students at the Faculty of Medicine during the academic year 2015-2016.

When planning your exchange studies and the required learning agreement please use the information provided under the **Courses** tab in this catalogue. Please read carefully the information of each course you wish to take (language of instruction, target group, course content, TIMING (autumn or spring term), preceding studies, other information containing LOCATION OF INSTRUCTION).

All exchange students must submit their exchange application through SoleMOVE, learning agreement is attached to the on-line application.

Accepted exchange students are required to register to all courses. Course registration takes place once you have arrived in Oulu and received your University of Oulu login information. More information on registration will be provided during orientation. When registering you will be able to find detailed information on teaching and schedule under **Instruction** tab.

Individual course codes include information on the level of course.

xxxxxP, xxxxyY = basic, introductory level courses

xxxxxA = for 2-3 year students, Bachelor level courses

xxxxxS = for 4-5 year students, Master level courses

In order to participate courses You should have enough background.

If You are going to have internship period in medicine or dentistry please contact directly your coordinator. You will be given 1.5 ECTS credits for each full week (37.75 hr).

Any general questions about courses in English at the Faculty of Medicine should be addressed to: virpi.parkkila@oulu.fi

Further information on application process for incoming exchange students:

<http://www.oulu.fi/english/studentexchange>

international.office(at)oulu.fi

## Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

060701A: Anaesthesiology, 1,5 op

040105Y: Basic Epidemiology, 1,5 op

060709A-01: Cardiology, 3 op

060702A: Dermatology and venereology, 3 op

060709A-02: Endocrinology, 3 op

060709A: Internal Medicine, 1 - 18 op

060722A: Interprofessional Health and Wellbeing Promotion and Prevention, 5 op

060709A-03: Nephrology, 3 op

060706A: Neurosurgery, 3 op  
 060710A: Oncology, 3 op  
 060711S-02: Practical Training Internal Medicine, 1 - 24 op  
 060711S-01: Practical Training Surgery, 1 - 24 op  
 060707A: Radiology, 6 op  
 060703A: Respiratory Medicine, 3 op  
 060709A-04: Rheumatology, 1 op  
 060704A: Surgery, 1 - 24 op

## Opintojaksojen kuvaukset

### Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

#### 060701A: Anaesthesiology, 1,5 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Alahuhta, Seppo Matias

**Opinto-kohteen kielet:** English

Ei opintojaksokuvauksia.

#### 040105Y: Basic Epidemiology, 1,5 op

**Opiskelumuoto:** General Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Jouni Jaakkola

**Opinto-kohteen kielet:** Finnish

**ECTS Credits:**

1.5 ECTS

**Language of instruction:**

Finnish/English

**Timing:**

During the second year, spring semester (C4)

**Learning outcomes:**

Upon completion of the course students will understand the basic epidemiologic thinking / basic concepts of epidemiologic methods in medical and health sciences and know the types of epidemiologic studies. They are also able to calculate measures of disease occurrence, use measures of effect to estimate the association between a given exposure and dis-ease and are able to define the concept of confounding and know how to apply it in a given situation.

**Contents:**

Structure of the Course:

- 1. Introduction to epidemiology; causation
- 2. Measures of disease occurrence and effect

- 3. Types of epidemiologic studies: cohort studies
- 4. Types of epidemiologic studies: case-control studies
- 5. Biases
- 6. Random error and statistical methods
- 7. Analyzing simple epidemiologic data
- 8. Control of confounding in stratified analysis
- 9. Interaction
- 10. Regression models in epidemiology

In addition, the course includes two exercise sessions conducted in small groups on: 1) epidemiologic methods based on critical reviews of articles and 2) calculation. Students will also review individually and critically an scientific article.

**Mode of delivery:**

Face-to-face teaching and independently performed exercise in the Optima environment.

**Learning activities and teaching methods:**

The course consists of lectures (10 h), two group exercises (3 h each) and one individual exercise (critical evaluation of an article) which is independently performed in the Optima environment.

**Target group:**

Medical and dental students of the second year.

**Prerequisites and co-requisites:**

No.

**Recommended optional programme components:**

Closely linked to the course in biostatistics taught in the same term.

**Recommended or required reading:**

Required reading: lecture notes and Rothman KJ. Epidemiology: and introduction. 2nd edition. Oxford University Press, New York, 2012.

**Assessment methods and criteria:**

Participation to the group exercise is mandatory and controlled for. The individual exercise is examined by the teachers. Written final examination.

Read more about [assessment criteria](#) at the University of Oulu webpage.

**Grading:**

The course unit utilizes a numerical grading scale 1-5/fail. At least 10 points are required for passing the examination.

**Person responsible:**

Professor Jouni Jaakkola.

**Working life cooperation:**

No.

**Other information:**

No other information.

## 060709A-01: Cardiology, 3 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opintokohteen kielet:** English

Ei opintojaksokuvauksia.

## 060702A: Dermatology and venereology, 3 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Kaisa Tasanen-Määttä

**Opintokohteen kielet:** English

Ei opintojaksokuvauksia.

## 060709A-02: Endocrinology, 3 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Olavi Ukkola

**Opintokohteen kielet:** English

Ei opintojaksokuvauksia.

## 060709A: Internal Medicine, 1 - 18 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Savolainen, Markku

**Opintokohteen kielet:** English

### ECTS Credits:

3.0 - 10.0 ECTS credits/ 80-267 hours of work (depending on chosen subjects)

- 060709A-01 Cardiology 3 ECTS/ 80 hours of work

- 060709A-02 Endocrinology 3 ECTS/ 80 hours of work

- 060709A-03 Nephrology 3 ECTS/ 80 hours of work

- 060709A-04 Rheumatology 1 ECTS/ 27 hours of work

The course units are held in the autumn semester. **Learning activities and teaching methods:**

Upon completion of the course the student is familiar with diseases of the internal medicine subspecialty in question (Cardiology, Endocrinology, Nephrology or Rheumatology) as well as diagnostics and treatment of these diseases. The student understands the connection between these subspecialties and other medical and internal medicine specialties. The student learns independent problem solving and critical thinking and is able to cooperate and coordinate treatment with various healthcare professionals.

The diseases with public health importance and selected rarer diseases of the subspecialty (Cardiology, Endocrinology, Nephrology or Rheumatology) are covered during the course, including diagnostic strategies, differential diagnoses, treatments available and management of these conditions.

Mostly face-to-face teaching. **Cardiology / Endocrinology / Nephrology:**

Group work 8h

Self-study 70 hours  
(exam 2 h)

Rheumatology:

Self-study 25 hours  
(exam 2 h)

**Language of instruction:**

English

**Timing:**

**Learning outcomes:**

**Contents:**

**Mode of delivery:**

**Prerequisites and co-requisites:**

The required prerequisite is the completion of 2 years of preclinical studies (including the courses in Anatomy, Medical Biochemistry, Pharmacology and Toxicology, Microbiology, and Physiology).

**Recommended optional programme**

For the medical students; no earlier than the third year of the studies after two years of preclinical studies are completed.

**components:**

Clinical practice 1-2 weeks in internal medicine wards is recommended. **Recommended or required reading:**

RECOMMENDED READING:

The relevant chapters of Axford JS & O'Callaghan C. "Medicine", 2<sup>nd</sup> Edition, (2004) Wiley-Blackwell.

- Endocrinology: Chapter 11 "Diabetes Mellitus, Lipoprotein Disorders and Other Metabolic Diseases"; pages 761-817, and Chapter 12 "Endocrine Disease"; pages 818-866
- Nephrology: Chapter 8 "Renal Disease, Fluid and Electrolyte Disorders"; pages 502-595
- Rheumatology: Chapter 4 "Rheumatic Disease"; pages 187-271

In Cardiology, **recommended** reading material includes relevant ESC guidelines (on Acute coronary syndromes, Heart failure, Atrial fibrillation)

In Nephrology, additional **required** reading material includes relevant chapters of Johnson RJ & Feehally J "Comprehensive clinical nephrology"

- Chronic renal failure and the uremic syndrome
- Clinical evaluation and manifestations in chronic renal failure
- Diabetic nephropathy
- IgA-nephropathy
- ADPKD

In Rheumatology, additional **required** reading material based on EULAR Compendium is distributed to students. Required reading includes also the material given by the teacher during the teaching period.

**Assessment methods and criteria:**

Cardiology / Endocrinology / Nephrology:

**Grading:**

Taking part into the group teaching events. Written final examination. **Person responsible:**

Rheumatology:

Written examination.

The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail. **060722A:**

Nephrology: nephrologist Risto Ikkäheimo

Rheumatology: rheumatologist Anna Karjalainen

Endocrinology: endocrinologist Olavi Ukkola

Cardiology: cardiologist Juha Perkiömäki

**Interprofessional Health and Wellbeing Promotion and Prevention, 5 op**

**Voimassaolo:** 01.08.2014 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Essi Varkki

**Opintokohteen kielet:** English

**ECTS Credits:**

5 ECTS credits

**Language of instruction:**

English

**Timing:**

September-October 2015 and February-March 2016. **Learning outcomes:**

The student knows the main principles of public health policies by WHO and is able to compare how they are applied in Finland and her/his own country. The student knows the public health strengths and challenges in European countries. The student is able to describe what kind of health and social services there are available for families and individuals of different ages. The student uses interprofessional methods to promote health and wellbeing of university students in European countries.

**Contents:**

Public health policy. The state of public health and wellbeing in Finland and in other European countries. Health and social care service systems in different countries. National public health strategies and programs in Finland. Ethical basis. Interprofessional health and wellbeing promotion methods. Economics.

**Mode of delivery:**

Blended teaching. **Learning activities and teaching methods:**

Lectures, workshops, e-learning and learning café.

**Target group:**

Students will produce a leaflet/ a poster/ or a movie of their chosen topic of health promotion. Students in the Faculty of Medicine

**Prerequisites and co-requisites:**

None

**Recommended optional programme components:**

None

**Recommended or required reading:**

Instructions for study material are given during the course. Students are also expected to actively search material themselves.

**Assessment methods and criteria:**

Taking part into all teaching events is required to pass the course.

This course unit utilizes continuous assessment. The assessment of the course unit is based on the learning outcomes of the course unit and all activities are taken into consideration

**Grading:**

The course unit utilizes grading scale pass/ fail (numerical grading scale 1-5 if needed). Active participation is required in order to pass the course.

**Person responsible:**

Clinical Instructor Essi Varkki

**Working life cooperation:**

No

**Other information:**

This course is organized together with Oulu University of Applied Sciences. The course is interprofessional, and it's offered to exchange students from various disciplines of health and social sector.

**060709A-03: Nephrology, 3 op**

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Risto Ikäheimo

**Opintokohteen kielet:** English

Ei opintojaksokuvauksia.

**060706A: Neurosurgery, 3 op**

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Sami Tetri

**Opintokohteen kielet:** English

**ECTS Credits:**

3.5 ECTS credits

**Language of instruction:**  
English

**Timing:**

During the fourth year, C 8

**Learning outcomes:**

The student knows the clinical presentation, diagnostics and treatment of neurosurgical diseases and trauma. The student can evaluate the urgency of treatment of neurosurgical conditions and understands their debilitating and often life-threatening nature. The roles of prevention and rehabilitation are also stressed.

**Contents:**

The management of neurosurgical trauma and diseases with special emphasis on the clinical competence required of a general practitioner

**Mode of delivery:**

Blended teaching

**Learning activities and teaching methods:**

The neurosurgical course is based on full-time participation in all clinical activities of the department for a minimum of two weeks during February and/or March when the neurosurgical course is offered. Bedside learning and the importance of the patient-doctor relationship as well as work in an environment that fosters multi-professional teamwork are stressed. For ECTS credits a textbook-based final examination must also be passed. It is usually taken during the last week of study.

**Target group:**

For medical students in their final year of study.

**Prerequisites and co-requisites:**

The required prerequisite is the completion of the following courses prior to enrolling for the course unit:  
A passing grade in clinical neurology is required before enrollment in the neurosurgical course.

**Recommended or required reading:**

K. W. Lindsay, I. Bone, G. Fuller. Neurology and Neurosurgery Illustrated, latest edition. Churchill Livingstone.

**Assessment methods and criteria:**

Participation with the guidance of an assigned doctor in the clinical and academic activities of the neurosurgical department, including small group learning sessions, clinical ward rounds, meetings, and observation of surgical procedures. ECTS credit requires passing a written final examination

**Grading:**

The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

**Person responsible:**

Professor Sami Tetri

**Working life cooperation:**

No

**Other information:**

No other information.

**060710A: Oncology, 3 op**

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Turpeenniemi-Hujanen, Taina Marjatta

**Opintokohteen kielet:** English

**ECTS Credits:**

3.5 ECTS credits

2.5 ECTS without exam

**Language of instruction:**

English

**Timing:**

September-December

**Learning outcomes:**  
Upon completion of this curricular unit, student should be able to understand principles of cancer etiology, diagnosis, therapeutic modalities and their adverse events, and palliative care.

**Contents:**

The diagnostics, oncological therapeutic modalities and monitoring of adult solid malignancies and lymphomas.

**Mode of delivery:**

Blended teaching.

**Learning activities and teaching methods:**

- Pre-examination (3 h, at home)
- Lectures / tutorials (10 h) concerning the entities of breast cancer, colorectal cancer, lymphomas, prostate cancer and lung cancer
- Group work:
  - Ward rounds with professor (6 x 2 h/week)
  - Demonstration of the planning of a CT-based radiotherapy and radiotherapy treatment (3 h)
  - Group practice of clinical problem-solving: Evaluation of the case reports (3 h)
- Final examination (2h)

**Target group:**

4-6<sup>th</sup> year medical students.

**Prerequisites and co-requisites:**

It is preferred that student has completed basic courses of pathology, clinical chemistry, radiology, internal medicine, and surgery prior to enrolling for the course unit.

**Recommended optional programme components:**

None

**Recommended or required reading:**

Jim Cassidy, Donald Bissett, Roy Spence, and Miranda Payne: Oxford Handbook of Oncology (3 ed.), 2011

<http://www oulu.fi/library/> -> [Subject Guides](#) -> [E-books](#) -> [Oxford Medical Handbooks](#) -> [Oxford Handbook of Oncology \(3 ed.\)](#)

**Assessment methods and criteria:**

Preliminary and final examinations must be passed. Preliminary examination and all other course units must be passed before participation in the final examination.

Evaluation is based on final examination (essays).

**Grading:**

The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail. **Person**

The grade is given only to the students who take the final examination.

Professor Taina Turpeenniemi-Hujanen

**responsible:**

**Working life cooperation:**

No

**Other information:**

The course will be organized only when there are six students.

## 060711S-02: Practical Training Internal Medicine, 1 - 24 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Savolainen, Markku

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

Ei opintojaksokuvauksia.

## 060711S-01: Practical Training Surgery, 1 - 24 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Advanced Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Juvonen, Tatu Sakari

**Opintokohteen kielet:** Finnish

**Voidaan suorittaa useasti:** Kyllä

Ei opintojaksokuvauksia.

## 060707A: Radiology, 6 op

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Tervonen, Osmo Antti

**Opintokohteen kielet:** English

**ECTS Credits:**

6.0 ECTS credits

**Language of instruction:**

English

**Timing:**



During the third year, **C5 Learning outcomes:**

Upon completion of the first curricular unit of radiology, student should be able to understand principles of radiological modalities, including nuclear medicine and pertinent image interpretation methods as well as obtain basic image interpretation skills of radiographs and indications for these examinations.

Upon completion of the second curricular unit of radiology, the student should be able to understand principles of image interpretation as well as obtain basic image interpretation skills of radiographs. The student should master the indications for selected investigations in radiology within general practices clinical context and understand correct ordering (percipio) and reporting routines in clinical situations.

**Contents:**

General introduction to radiology (techniques). Radiology of skeletal system, thorax and visceral and interventional radiology. Neuroradiology.

**Mode of delivery:**

Lectures, tutored film reading sessions, hands on ultrasound lessons. **Learning activities and teaching methods:** Tutored film interpretations, demonstrations (Hands-on US practice, radiograph filming, ER-work observance), independent study.

**Target group:**

Exchange students that have studied medicine at least three years. **Recommended optional programme**

**components:**

None

**Recommended or required reading:**

Mettler, F.A. Essentials of Radiology.

**Assessment methods and criteria:**

Hofer, M. (ed.) Ultrasound Teaching Manual. **Grading:**

Written examinations (completed written exam is a prerequisite to obtain course credits) **Person responsible:**

The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail. **Working life**

**cooperation:**

No

**Other information:**

Maximum of 6 students will be accepted to the course.

## 060703A: Respiratory Medicine, 3 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Terttu Harju

**Opintokohteen kielet:** English

**ECTS Credits:**

3 ECTS credits **Language of instruction:**

English **Timing:**

October-December **Learning outcomes:**

Upon completion of the course the student is familiar with the major causes of pulmonary symptoms, pathogenesis, diagnosis, differential diagnosis and treatment of the most common respiratory diseases. Student has also gained an overview on more rare respiratory diseases. After the course the student is able to perform and interpret the most important diagnostic procedures in solving pulmonary problems.

**Contents:**

The aim of the course is to provide students with knowledge of the major causes of pulmonary symptoms (dyspnea, cough, hemoptysis, wheezing and sputum) and familiarize them with the pathogenesis, diagnosis, differential diagnosis and treatment of the most common respiratory diseases. These diseases include asthma, COPD, pneumonia, tuberculosis, thoracic malignancies, pleural effusion, and sleep-related breathing disorders. An emphasis will be on the conditions that can be diagnosed and treated in the primary care.

Students will also gain an overview on more rare respiratory diseases, such as interstitial lung diseases, pulmonary vasculitis, lung manifestations of rheumatic and other systemic diseases. After the course, students will be able to perform and interpret the most important diagnostic procedures in solving pulmonary problems: lung function tests (including peak expiratory flow and spirometry), measurement of oxygen saturation, analysis of blood gases and sputum analysis. They will be familiar with other diagnostic procedures: bronchoscopy, lung biopsy, thoracentesis and sleep study. The students will know principles of acute respiratory failure and use of non-invasive ventilation.

**Mode of delivery:**

Mostly face-to-face teaching. **Learning activities and teaching methods:**

Obligatory: 8 hours of small group teaching and lectures, 80 hours of independent work. **Target group:**  
 Voluntary: participation in the seminars (Tobacco and alcohol, Chestpain and dyspnea 2x6h)  
**Prerequisites and**  
 3<sup>rd</sup>-6<sup>th</sup> year medical students.  
**co-requisites:**  
 It is preferred that the student has completed basic courses of pathology, clinical chemistry and radiology prior to enrolling for the course unit.  
**Recommended optional programme components:**  
 None  
**Recommended or required reading:**  
 Palange P, Simonds AK. ERS handbook. Respiratory Medicine. 2nd edition.  
**Assessment methods and criteria:**  
 Evaluation is based on examination. All course units must be passed before participation in the examination.  
**Grading:**  
 The course unit utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.  
**Person responsible:**  
 The grade is given only to the students who take the examination.  
 Professor of Respiratory Medicine  
**Working life cooperation:**  
 No  
**Other information:**  
 The course will be organized only when there are at least four students.

## 060709A-04: Rheumatology, 1 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Partial credit

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Karjalainen, Anna Helena

**Opintokohteen kielet:** English

Ei opintojaksokuvauksia.

## 060704A: Surgery, 1 - 24 op

**Voimassaolo:** 01.08.2013 -

**Opiskelumuoto:** Intermediate Studies

**Laji:** Course

**Vastuuyksikkö:** Medicine

**Arvostelu:** 1 - 5, pass, fail

**Opettajat:** Juvonen, Tatu Sakari

**Opintokohteen kielet:** English

### ECTS Credits:

0.1 – 9.0 ECTS credits

### Language of instruction:

English

### Timing:

During the autumn and spring semester

### Learning outcomes:

Orthopaedics and traumatology orientated mini-course of surgery, where students can train handicraft skills in clinical examination of patient with support- and mobility organ problems. Treatment of basic fractures of ankle and wrist will be revised and students will prepare casts and plasters. In urology session student will get familiar with some patient cases. In suturing techniques- session student will learn some special stitches after knowing the basics of suturing techniques.

### Contents:

Suturing techniques, clinical examination of orthopaedic patient and clinical problem solving in urology.

### Mode of delivery:

Small group teaching sessions.

### Learning activities and teaching methods:

Group sessions in autumn semester (1 ECTS):

- Suturing techniques 2h
- Clinical examination of hip and knee 2h

- Clinical examination of ankle and practise of preparation of the below knee cast 2h
- Urology, clinical problem solving 2h

Students can participate in 6 h seminar of mini-symposium which is organised by the Departments of Surgery and Internal Medicine. This includes a preparation of an oral presentation or a patient case (15-30min). Mini-symposium is equivalent for 1.2 ECTS credits.

Group sessions in spring semester (0.7 ECTS):

- Suturing techniques 2h
- Clinical examination of shoulder and the treatment of the distal radius fracture 2
- Urology, clinical problem solving 2h

Students can participate in 6 h seminar of traumatology which includes a preparation of an oral presentation or preparing other activity related to treatment of trauma patient to the 3<sup>rd</sup> year student groups (10-15min).

**EXAMINATION:** Minimum area is 1 ECTS (and one subject). Student can choose to do the examination only of those areas of surgery listed below:

Gastroenterology 2 ECTS

Thoracic and vascular surgery 1 ECTS

Urology 1 ECTS

Traumatology 2 ECTS

Orthopaedics 2 ECTS

**Target group:**

Medical students

**Prerequisites and co-requisites:**

A passing grade in preclinical studies is required before enrollment in surgical studies.

**Recommended optional programme components:**

None

**Recommended or required reading:**

The book for surgery exam:

Essential surgery. Problems, diagnosis & management, 4th edition. Burkitt, H. George, Quick, Clive R.G. & Reed, Joanna B.

If you study all below you get in total 4 credits:

- pages 273-456 (gastroenterology) à 183 pages= **2 credits**
- pages 487-468 (thoracic surgery) à 19 pages

pages 567-623 (angiology, cardiovascular disorders) à 57 pages

pages 624-634 (cardiac surgery) à 10 pages

in total 86 pages= **1 credit**

- pages 469-484 (groin and male genitalia) à 15 pages

pages 469-565 (kidney, urinary tract) à 96 pages

in total 111 pages= **1 credit**

The book for the exam of orthopaedics and traumatology:

Essential Orthopaedics and Trauma, 5th edition By David J. Dandy, MD, MA.

Orthopaedics and Traumatology: 299 pages = **4 credits**

- Orthopaedics à 153 pages = **2 credits**

pages 11-31

pages 293-316

pages 335-345

pages 365-465

- Traumatology à 146 pages = **2 credits**

pages 93-239

**Assessment methods and criteria:**

Evaluation is based on examination.

**Grading:**

The course unit utilizes a numerical grading scale 1-5. The examination contains essay questions. The quantity of questions depends on the quantity of subspecialties chosen by a student. Each question is evaluated with scale 0-6. Points of each question will be added up and the sum will determine the grade (grading scale 1-5). Level of acceptance is half of the total points that is equivalent to grade 1

**Person responsible:**

Clinical teacher Maarit Valkealahti

**Working life cooperation:**

No