

Human Health and Disease: A Clinical Approach Summer 2009

**Medical Practice and Policy, session 1
Section A**



**Instructors: Regitze Illum
and guest lecturers from
DIS Human Health and Disease faculty**

DIS DANISH INSTITUTE
FOR STUDY ABROAD

Human Health and Disease: Summer 2008

Session 2: Biological and Clinical Approaches to Human Disease

Section A

Instructor

Regitze Illum



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Education: BSc (Pharmacy), Danish University of Pharmaceutical Sciences 1998. MSc (Human Biology), University of Copenhagen 2001. Diploma in adult training and education 2007.

Employment: Research assistant, Bispebjerg Hospital (2001), IAESTE Trainee at Praecis Pharmaceuticals, Waltham, Massachusetts (2001), Research assistant, Danish University of Pharmaceutical Sciences (2002), PhD student at Drug Research Academy, Danish University of Pharmaceutical Sciences (2002-2005).

Lecturer at The Nursing College Roskilde, University College Zealand (2007-2009), External lecturer at DIS (2007-2009), Assistant Program Director, Science and Health, DIS (2009-present).

Teaching Assistant:

Mette Berg Christiansen

Medical student in 7th semester at Copenhagen University.

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Objectives

The objective of the course is to introduce students to the most important human diseases, their diagnosis and treatment, and to clinical working methods of physicians as practiced at a University hospital in Copenhagen (Rigshospitalet).

Upon completion of this course, students will:

1. Be able to write a structured medical report
2. Know the rationale for choice of tests and treatments in clinical practice
3. Acquire basic manual skills (suture, CPR, IV)
4. Obtain knowledge of human anatomy, physiology, and scientific context
5. See medical practice in a social, international, and scientific context

Content

The clinical approach of the course implies studying symptoms, signs, diagnostic methods and treatment of the most important human diseases, writing patientcase reviews based upon medical records, and patient interviews, visiting various clinical and diagnostic hospital departments, and performing physical examinations on phantoms or other students.

The course, however, does not provide regular medical training corresponding to that of medical students and does not include shadowing doctors or physical examination of patients. Patient demonstrations are included in some, but not all, lectures.

Prerequisites

At least one year of biology and one year of chemistry at university level. The course is oriented towards serious students with a documented academic interest in medicine.

Evaluation

Students will be evaluated based on participation, one short test, two written clinical case reviews, two theoretical case review presentations, an assignment related to the study tour, and a final examination.

Test	15%
Theoretical case reviews (2 at 5%)	10%
Clinical case reviews (2 at 5%)	10%
Final examination	25%
Study tour journal assignment	20%
Participation	20%

Participation covers following areas:

1. Attendance
2. Level of preparation and ability to answer questions asked in class
3. Involvement in class and group discussions
4. Level of individual research and contribution to discussions
5. Participation in study tour activities

Tests and Final:

There will be one test throughout the course. This test will consist of a mix of short answer questions and essay questions. The test may be given at the beginning of class or at the end. If the latter, the material covered in the lecture that day may be on the test; so, make sure to pay close attention to the information discussed in lecture that day. The test in class will last a maximum of 30 minutes depending on the amount of information covered. The final for this course will be cumulative and will be written in the same manner as the test. The final will be two hours in duration.

Study tour assignment

You will receive more information about the study tour assignment later in the course. The study tour assignment will be presented in class on June 8th.

Case Reviews

There will be two different types of clinical cases in this Human Health and Disease course. The first will be the **Clinical Case Reviews** (or Patient Cases). During the course, each student will be presented with two different real patients, and everyone will write up their own case history about the signs, symptoms, ailments and treatments for the specific patients that are introduced to. More details will be given on this activity before the first Clinical Case Review.

The other activity is the **Theoretical Case Review (TCR)**. While the Clinical Case Reviews could be any and all types of diseases (depending on the patients available and his or her willingness to participate), the Theoretical Cases are specialized to the concentration that the class is working on during that time, i.e. the disease will relate to the immune system if that is the topic that has been discussed and will be discussed during the day of presentation.

Theoretical case reviews will be discussed in class, allowing you to understand and apply the major themes you learn about in each body system to real-life practices (even though they are in theory).

Important information

- **It is mandatory to attend classes in which clinical case reviews are presented. Missing a class would result in a 'fail' in that paper.**

Required Readings

Textbooks:

- Hole JW: Essentials of Human Anatomy & Physiology, 9th Edition. WC Brown Publishers, London 2003: Hole
- Ford MJ, Hennessey, I, and Japp, A: Introduction to Clinical Examination, Eighth Edition. Churchill Livingstone, London 2005: Ford.Munro JF, Ford MJ: Introduction to Clinical Examination, 8th Edition.
- O'Neill P, Dornan T, Denning DW: Medicine. A Core Text with Self-Assessment, Churchill Livingstone, 2nd Edition, 2002: O'Neill.

In binder:

1. The World Health Report 1998: Life in the 21st Century, Geneva: WHO; 1998, pp.1-4, 17-18.
2. Advanced Trauma Life Support for Doctors- Initial Assessment and Management.
3. Oncology, by D.A. Cameron & J.F. Smyth, Chapter 5, pp. 213-225, Davidson's Principles and Practice of Medicine, 19th edition.
4. Lecture Notes on Clinical Examination. Clinical Case Review -standard.
5. Background Notes on Diagnostic Imaging & Lecture Notes on Radiology, Blackwell science 1998: Introduction, pp.1-18.
7. Part I – The Field of Pediatrics, by R. E. Behrman, pp.1-22, Nelson Textbook of Pediatrics, 17th ed, 2003.
8. Lecture Notes on Disease Causing Microorganisms.
9. Background notes on Immunisation & Mäkelä PH, Lankinen K: "Preventions of Infectious Diseases by Immunisation", Health and Disease in Developing Countries, London: Macmillan 1994, pp. 469-478..
10. Feigin and Cherry: Textbook of pediatric infectious diseases, Saunders 1998: Temporal patterns of infection and disease, pp.117-125.
11. Medical psychiatry, by G.G. Lloyd &M.C. Sharpe, Chapter 8, pp. 245-269, Davidson's Principles and Practice of Medicine, 19th edition.
12. Clinical care, by D.F. Treacher & I.S. Grant, pp.185-211, chapter 4, Davidson's Principles and Practice of Medicine, 19th edition.

*NOTE: Not all reading assignments will be covered in class, but all reading assignments are absolutely necessary in order to follow what is actually covered in class.

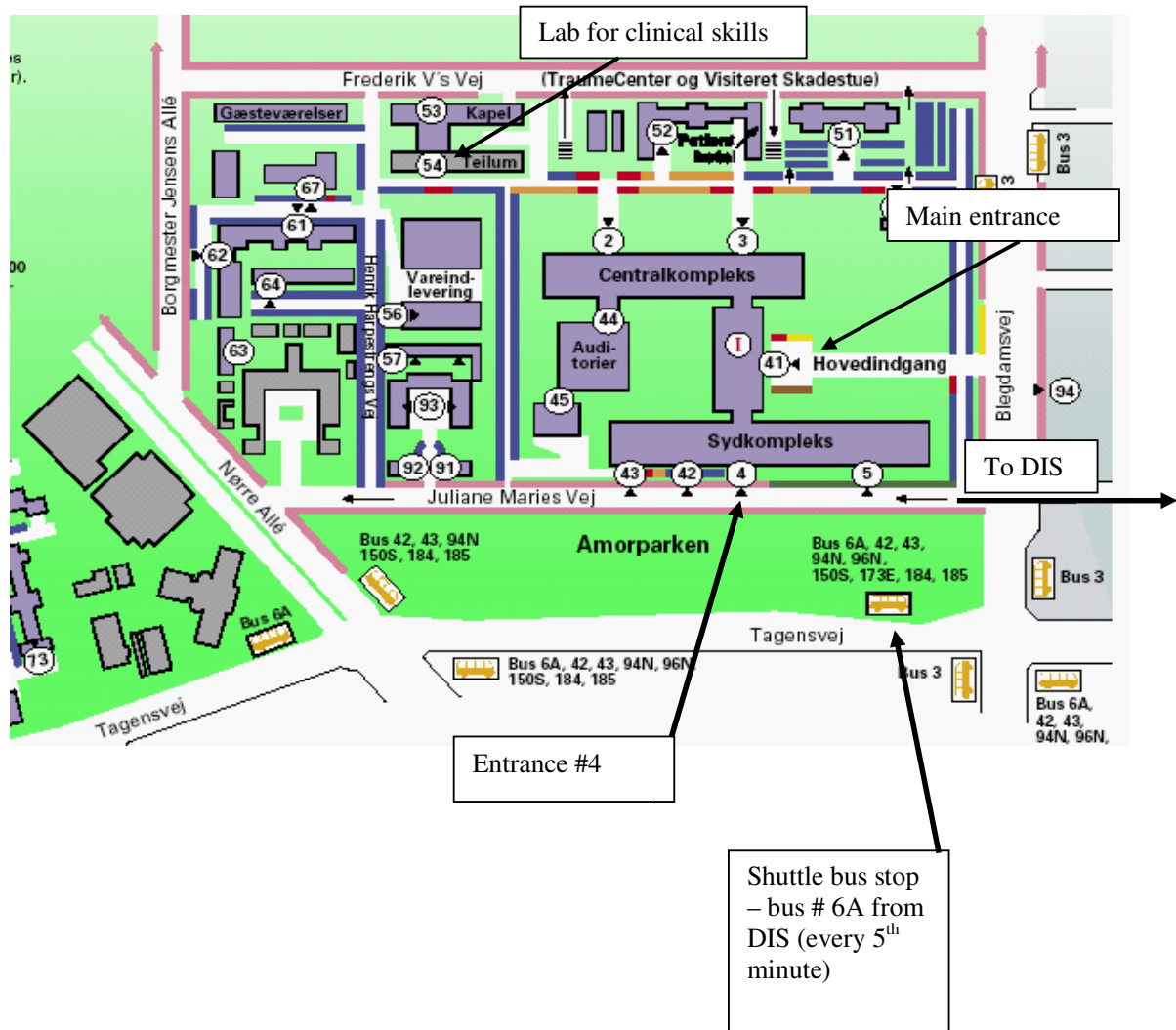
Practical Information

Medical Practice and Policy faculty and staff have put many hours into selecting and organizing the readings for this course. Please make sure to read all the material assigned; the reading material has been carefully chosen and all of it is pertinent to your success in this course. You have an obligation to your fellow classmates and yourself to come prepared to class. Lectures will not cover all of the readings, however, you are still responsible for the information. If you have questions or need clarification about a reading or a lecture material do not hesitate to speak up and/or contact teaching assistant, TA. This is very important. The professors for this course have no office hours, as such, please feel free to set up appointments with via email. The

professors' emails have been provided; please feel free to email them, the TA or Libby Zorn at ez@dis.dk to set up an appointment or simply ask a question.

Location: Rigshospitalet, Room 4062 (you will be accompanied to the hospital on the first day).

Detailed Map of the National University Hospital (Rigshospitalet)



Transportation: Bus 6A to the stop “Blegdamsvej”.

Course Overview

	Date	Lecture Topics	Lecturer	Text
1.	Mon, May 25 11.00-13.00 (at 10 B.15)	- Introduction to DIS and Medical Practice and Policy program - Information on study tour	Regitze Illum & Mette Berg	
2.	Tues, May 26 16.00-19.30 (Meet Jamie at DIS front desk at 15:20)	- Course overview and introduction - Standard clinical exam - From diagnosis to therapy - Imaging techniques in diagnosis - Theoretical case 1 handed out	Regitze Illum & Mette Berg	Ford: pp. 1 -55 Binder #4 & #5
3.	Wed, May 27 15.00-18.00	Heart: - Anatomy - Physiology - Cardiology		Hole: pp. 323-360 O'Neill: pp. 11-21 & 41-47
4.	Thurs, May 28 15:00-18:00	Central nervous system: - Anatomy - Physiology - Pathology Visit to macroanatomical lab Clinical lab 1: CNS exam Clinical case 1 presented		Hole: pp. 202-210 & 220-233 O'Neill: pp. 218-223 & 235-238 Ford: pp. 56-59 & 117-152
5.	Fri, May 29 14:30-17:30 (Frederiksberg Hospital)	Gastrointestinal system: - Anatomy - Physiology - Pathology Clinical lab 2: endoscope exam room Test		Hole: pp. 385-428 O'Neill: pp. 135-152 (focus on hepatitis)
	Mon, June 1	Holiday/Pinse (Whitsun)		
6.	Tues, June 2 10:00-11:30 (Medicinsk Museion) 15:30-18:30 (Roskilde Hospital)	Field study to medical history museum (10-11.30) Gyn/Obs (15:30-18:30): - Anatomy - Physiology - Pathology		Hole: pp. 507-514 & 535-538 Ford: pp. 110-111 and 114-115 Hole (9th): 422-424 (Section 10.5) O'Neill: 500-508 (Sections 19.4-19.5) and 510-516 (Sections 19.7-19.8)
	Wed, June 3	Study tour to Stockholm		
	Thurs, June 4	Study tour to Stockholm		
	Fri, June 5	Study tour to Stockholm		
7.	Mon, June 8 12:30-14:00 15:00-18:00	Study tour assignment presentations (12:30-14:00) International Health & Pediatrics (15:00-18:00) Clinical case 2 presented		Reading assignments to be handed out
8.	Tue, June 9 15:30-18:30 (Lab for Clinical Skills)	Clinical lab 3: Suture		

9.	Wed, June 10 15:00-18:00	Trauma & Anesthetics		Texts in binder
10.	Thurs, June 11 15:00-18:00	Lungs: - Anatomy - Physiology - Pathology		Hole: pp. 428-453 O'Neill: pp. 80-98
11.	Fri, June 12 15:00-18:00	Q&A Medical research Wrap-up FINAL EXAM		