Human Health and Disease: A Clinical Approach
Summer 2017, Session II, Section B

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Prerequisites
At least one year of biology and one year of chemistry at university level.
The course is aimed at serious students with a documented academic interest in medicine.
Content
The clinical approach of the course implies studying symptoms, signs, diagnostic methods and treatment of the most important human diseases. This also includes writing patient case reviews based upon medical records, patient interviews, visiting various clinical and diagnostic hospital departments, and performing physical examinations on phantoms or other students. This course does not include physiology and anatomy, but these are essential for understanding the different topics and are therefore considered ‘basic reading.’
The course 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.

Objectives
The objective of the course is to introduce students to the most important human diseases, their diagnosis and treatment, and to the clinical working methods of physicians as practiced at a large, Danish referral University Hospital in Copenhagen. Upon completion of this course, students will be able to:
1. Write a structured medical report
2. Explain the rationale for choice of tests and treatments in clinical practice
3. Copy basic manual skills (suture, IV, catheter insertion) and give a basic explanation of the techniques
4. Discuss knowledge of human anatomy, physiology, and scientific context
5. Describe medical practice in a social, international, and scientific context
6. Outline the epidemiology of major diseases in both the industrialized world and the developing world.

Evaluation
Students will be evaluated based on participation, three written case reviews, one small test, one study tour assignment and a cumulative final examination.

<table>
<thead>
<tr>
<th>Test</th>
<th>10%</th>
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</thead>
<tbody>
<tr>
<td>Patient Cases (TPC and CPC – 15% each)</td>
<td>30%</td>
</tr>
<tr>
<td>Study Tour Assignment</td>
<td>20%</td>
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<tr>
<td>Final examination</td>
<td>30%</td>
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<tr>
<td>Participation</td>
<td>10%</td>
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Class participation covers the following areas:
1. Attendance
2. Level of preparation and ability to answer questions asked in class
3. Involvement in class and group discussions
4. Engagement in field studies and lectures

Electronics
Computer and cell phone usage is not allowed in class. It is distracting to both your classmates and your instructors, so please keep them off and out of sight during class!

Policy on late assignments:
Late assignments will receive a deduction by half a letter grade for each day that the assignment is late.

Disability resources:
Any student who has a need for disability accommodations should contact Academic Support (acadsupp@dis.dk) to coordinate this. Upon DIS approval, students should inform the instructor of accommodations within the first two days of class.
Academic Honesty:
DIS expects that students abide by the highest standards of intellectual honesty in all academic work. DIS assumes that all students do their own work and credit all work or thought taken from others. Academic dishonesty will result in a final course grade of “F” and can result in dismissal. The students’ home universities will be notified. DIS reserves the right to request that written student assignments be turned in electronic form for submission to plagiarism detection software. See the Academic Handbook for more information, or ask your instructor if you have questions.

Practical Information
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 Human Health and Disease: A Clinical Approach. You have an obligation to your fellow classmates and yourself to come prepared to class. Lectures will not cover all of the assigned 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 the professors for this course have no office hours, as such, please feel free to set up appointments via email. Please feel free to email the faculty, course assistant, or the program assistant to set up an appointment.

Tests and Final
This course consists of two exams, one test and one final (see short schedule above for dates). These tests will consist of a mix of short answer questions and essay questions. Tests in class will generally last 30 minutes depending on the amount of information covered. The final for this course is cumulative and written in the same manner as tests. The final is two hours in duration.

Case Reviews
There are two different types of clinical cases in this course. The first is the Clinical Patient Case where students are presented with a patient, ideally, with symptoms related to material covered in the course. Following the patient interview, students will write up their own case history about the signs, symptoms, and treatments discovered from the patient. More details will be given on this activity as the time approaches for the first Clinical Patient Case.

The other case review is the Theoretical Patient Case. While the Clinical Patient Cases could involve a variety of diseases, Theoretical Patient Cases are targeted to diseases and treatments covered in class. Students are to a case, and write up their differential diagnosis process as well as hypothesized diagnosis and treatment. There will be given an introduction to the Theoretical Patient Case in class, June 27.

**It is mandatory to attend classes in which clinical & theoretical patient cases are presented. Missing a class would result in a ‘fail’ in that paper.**
Study Tour Assignment
The study tour assignment has three main components: an observation booklet, an on-tour group presentation/participation, and a group presentation. At the study tour orientation, you will be divided into groups of 3-4 people and will choose a specific theme to focus on for the assignment. This subject will be the basis of your group’s research and presentation.

You will be given an observation booklet on the study tour; its purpose is to take notes during the different visits. You will then compare notes with your group members to prepare a brief presentation about your observations and how they relate to your research topic at the end of the study tour.

The grade for the assignment consists of the preliminary research question (5%), presentation/on-tour participation (20%), and group final presentation (75%). The study tour final presentation are due Tuesday, June 27.

Study tour to Vienna (Monday, June 19- Friday, June 23)
Study tours are an intense combination of discipline-related and cultural exploration and experiences, bonding with fellow students, and fun. You will visit course-relevant sites, meet important actors in health care delivery, and apply the classroom to real world environments. With this being said, the following are the objectives of the study tours in the Human Health & Disease course:

- To showcase examples of clinical practice and health care systems in different sectors and countries
- To broaden the students’ view of the challenges that health care providers face
- To show examples of research with clinical relevance
- To explore and learn more about Vienna through exposure to the culture, history, and socioeconomic climate of the region
- To engage in your personal learning process outside the classroom by actively participating and challenging your current ideas and assumptions
- To get to know your fellow students and DIS faculty/staff in an educational and social setting outside DIS

Required Readings
Reading assignments are listed below as part of the course content. They can be found in the textbook, reading compendium, or posted on Canvas.

Textbooks:

*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.
# Course Schedule Summer 2017, Session II

<table>
<thead>
<tr>
<th>Date</th>
<th>Time &amp; Location</th>
<th>Lecture Topics</th>
<th>Lecturer</th>
<th>Text</th>
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<tbody>
<tr>
<td><strong>Week I</strong></td>
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<tr>
<td><strong>Tues June 13</strong></td>
<td>Please Pick up textbooks before class</td>
<td><strong>Textbook Pick up</strong>, 10:00 – 14:00 in DIS, F24-206 (Frederiksberggade 24 – Room 206)</td>
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<tr>
<td>14:30 – 16:30</td>
<td>DIS, V10-A33</td>
<td>Introduction Clinical Examination</td>
<td>Amardeep CA, Morten</td>
<td>On Canvas: “Notes on history taking” Ford: pgs. 2-53 (available on CANVAS)</td>
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<tr>
<td>17:30 – 19:30</td>
<td>DIS, V10-A33</td>
<td><strong>General Medicine</strong> Danish Healthcare System</td>
<td>Signe CA, Morten</td>
<td>On Canvas: - General Practice and Primary Health Care in Denmark - HIT: executive summary The Danish healthcare system Profile</td>
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<tr>
<td><strong>Be prepared to be introduced to one Clinical Patient Case in your Lectures</strong></td>
<td>Due Monday June 19 uploaded to Canvas by 12.00</td>
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<td><strong>Wed June 14</strong></td>
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<tr>
<td>8:30 Meet at McDonalds of København H to depart to Malmö Hospital</td>
<td>BRING YOUR PASSPORT Paraclinical Tests</td>
<td>Amardeep CA, Morten</td>
<td>Hole: Chapter 18</td>
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<tr>
<td>9:30-12:30</td>
<td>DIS, V10-A33</td>
<td>Interactive Case-based Discussions (CBD)</td>
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<td>Lunch provided by DIS</td>
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<tr>
<td>13:30 – 16:30</td>
<td>DIS, V10-A33</td>
<td><strong>Respiratory System</strong> - Anatomy and physiology - Most frequent disease entities - Diagnostic methods and treatment possibilities</td>
<td>Amardeep CA, Morten</td>
<td>Hole’s: Chapter 16</td>
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<tr>
<td><strong>Thurs June 15</strong></td>
<td></td>
<td>Study Tour Orientation Vienna</td>
<td>Science &amp; Health Department Staff CA, Morten</td>
<td>On Canvas: HIT Executive Summary- Austria</td>
</tr>
<tr>
<td>10:00 – 12:00</td>
<td>DIS, V10-A33</td>
<td>Psychiatry - Introduction to Psychiatry - Affective mood disorders - Schizophrenia and delusional disorders</td>
<td>Amardeep CA, Morten</td>
<td>Davidson’s Principles and Practice of Medicine, chapter 8, pp. 233-246 (Medical Psychiatry)</td>
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<tr>
<td>Time</td>
<td>Location</td>
<td>Topic</td>
<td>Instructor</td>
<td>Notes</td>
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| 13:00 – 17:00| DIS, V10-A33| **Cardiology I and II**  
- Anatomy and physiology  
- ECG  
- Investigations  
- Ischemic Heart Disease  
- Deep vein thrombosis  
- Hypertension | Amardeep CA, Morten | Hole’s: Chapter 13 |
| Fri June 16  | DIS, V10 A33| **BRING YOUR PASSPORT** Test 1                                        | CA, Morten       | NA             |
|              |             | Depart to Malmö Hospital together                                      |                  |                |
| 8:15-9:00    | DIS, V10 A33| Diabetes                                                              | Amardeep CA, Morten | O’Neill: Chapter 7, section 7.8 |
| 10:00 – 11:30| Malmö Hospital | Gastroenterology I  
- Anatomy and physiology | Amardeep CA, Morten | Hole’s: Chapter 15 |
| 11:30 – 12:30| Malmö Hospital |                                             |                  |                |
|              |             | Lunch provided by DIS                                                  |                  |                |
| 13:30 – 16:30| Malmö Hospital | Continued Gastroenterology I And Gastroenterology II  
- Peptic ulcers  
- Inflammatory bowel diseases  
- Bowel cancer | Amardeep CA, Morten | Hole’s: Chapter 15 |
|              |             | **Week II**  
Study Tour to Vienna  
Monday June 19- Friday June 23  
Tour Leaders: Morten Andersen, CA & Ryan Polito, S&H Program Assistant  
**Monday June 19, Clinical Patient Case Due to Canvas** |
| Mon June 26  |             | Emergency Medicine  
- The management of stopped-heart diagnosing  
- Treatment of cardiac arrest  
- Practical training in resuscitation  
- Team training using simulation centre in various patient case scenarios | Isabel CA, Karen | Reading on Canvas |
<p>|              |             | CAMES Herlev Hospital                                                  |                  |                |</p>
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<thead>
<tr>
<th>Date</th>
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<th>Activity</th>
<th>Instructor(s)</th>
<th>Notes</th>
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<tr>
<td>Tues June 27</td>
<td>10:00-12:30</td>
<td><strong>Obstetrics &amp; Gynaecology</strong> The female Reproductive System</td>
<td>Amira CA, Karen</td>
<td>Hole’s: Chapter 19 (19.4 until end) and chapter 20 (start until 20.3)</td>
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<td></td>
<td>13.30 – 15.30</td>
<td><strong>Study Tour Assignment</strong> Presentations</td>
<td>CA, Morten CA, Karen</td>
<td>Study Tour Assignment due</td>
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<tr>
<td>Wed June 28</td>
<td>10.00 – 12.00</td>
<td><strong>Neurology</strong> - Anatomy of the central and peripheral nervous system - Basic neurology, including neurological diseases: stroke, headache, meningitis, epilepsy</td>
<td>Signe CA, Karen</td>
<td>Hole: 230-245 and O’Neill 218-223 (section 5.2) &amp; 225-231 (section 5.4 – emphasis on diagnosis, prognosis, and prevention)</td>
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<td>15:00 – 17:00</td>
<td><strong>Infectious Diseases</strong> - Sepsis - Most common infectious diseases - Malaria - Immunology and infections - The general organization of the immune system - How does the immune system work</td>
<td>Amira CA, Karen</td>
<td>O’Neill: pp. 218-223 &amp; 408-431 (emphasis on 10.1, 10.2, &amp; 10.9) Hole: pgs.384-394</td>
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<tr>
<td>Thurs June 29</td>
<td>14:00</td>
<td>Wrapt Up session</td>
<td>Signe Elisa S TBA CA, Karen</td>
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<td></td>
<td>15:00-16:00</td>
<td><strong>Theoretical Patient Case Due via Canvas at 12.00</strong></td>
<td>Signe CA, Karen</td>
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<tr>
<td></td>
<td>16:00-19:30</td>
<td><strong>DIS Clinical Skill Sessions</strong></td>
<td>Signe Elisa S. CA, Karen</td>
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<tr>
<td>Fri June 30</td>
<td>10:00 – 12:00</td>
<td>Final Cumulative Exam Proctored by DIS Staff (Lasse Knudsen)</td>
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Transportation to Malmö Hospital:
*Jan Waldenströms Gata 24
214 21 Malmö, Sweden*

You will be taking public transportation to Malmö Hospital on days that you have class there and your transportation pass provided by DIS will cover you from DIS to class.

**To get to Malmö, the following route is recommended:**
From Copenhagen Central Station (København H) Take the 1040 Regional Train towards Kalmar Centralstation, the 1044 Regional Train towards Göteborg Centralstation, or 1046 regional train towards Karlskrona Central Station. Get off at Triangeln Station regardless of which train you choose to take and walk around 11 minutes, make sure to exit through the south exit
Approx time: 1 hr

First Day of Class: Meet Amardeep in front of CRC Clinical Research Center (Circled) and you will walk as a group to the Eye department

**Class will be held in the basement of the eye department Jan Waldenströms gata 24**