

Human Health and Disease: A Clinical Approach Section G Fall 2017

Instructors: Dr. Marie Deen Christensen and Dr. Sabrina Khan

Guest Lecture: Casper Christensen

Tuesday and Friday, 15:30-17:30, Glostrup Hospital

Instructors



Marie Deen Christensen

M.D. (Aarhus University, 2014). PhD student in Neuroscience, University of Copenhagen. Main research includes pathophysiology of migraine without aura, human migraine models, and neuroimaging. Affiliated with the Human Migraine Research Unit, Danish Headache Center since 2014. Dept. of Neurology, Rigshospitalet and Glostrup Hospital, (Copenhagen University Hospital), 2014. With DIS since 2014.



Sabrina Khan

M.D. (University of Copenhagen, 2013). PhD student in Neurology at Rigshospitalet Glostrup, University of Copenhagen. Research in migraine and underlying pathophysiological mechanisms. Affiliated with the Human Migraine Research Unit, Dept. of Neurology at Rigshospitalet Glostrup since 2012. With DIS since 2015.

Course Assistant



Jack Junchi Xu 12th semester medical student at University of Copenhagen Medical School. B.Sc. Medicine, University of Copenhagen, 2014. Student researcher, Department of Medical Genetics, Rigshospitalet. Board member, Synapse - Life Science Connect. Nurse Assistant, FADL (The Association of Danish Medical Students). With DIS since 2017. jackxu1990@hotmail.com

Learning objectives

The objective of the course is to introduce students to the most important human diseases, their diagnoses and treatments, and to the clinical working methods of physicians as practiced at a large, Danish University Hospital (Roskilde and Glostrup Hospital) both 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 (IV insertion, suture, and 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.

Content

The clinical approach of the course implies studying symptoms, signs, diagnostic methods and treatment of the most important human diseases, writing patient case 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 of doctors or physical examination of patients. Patient demonstrations are included in some, but not all, lectures.

DIS Contacts

Lisbeth Borbye, Program Director

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Science & Health Program Office, Vestergade 10-B12

Pre-requisites

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

Evaluation

Students will be evaluated based on participation, three theoretical patient cases, two small tests, and a final examination. There will also be a small assignment related to the study tours. The grade on this assignment will contribute to your participation grade

Tests (2 at 10%)	20%
Patient cases (4 at 7,5%)	30%
Final examination	30%
Study tour Assignment	10%
Participation	10%

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. Level of individual research and contribution to discussions

Policy on late papers

Late papers will be accepted, but your grade for the paper will be reduced by half a point for each day that it is late.

Electronics

Computer is allowed for class purposes. It is not allowed for other activities such as social networks, sending personal e-mails etc. If you use a computer for other purposes, it will affect your participation grade. Cell phone usage is not allowed in class. It is distracting to both your classmates and your instructors, so please keep them turned off. Otherwise it will affect your participation grade.

Theoretical Patient Case (TPC)

During the semester, you will be presented with three theoretical patient cases in class to work on individually. You are responsible for suggesting, based on the case you get, an appropriate course of questions to get a detailed medical history that will allow you to structure a relevant clinical exam and an appropriate course of paraclinical investigations leading to a preliminary diagnosis. More detailed information will be provided in class.

Clinical Patient Case (CPC)

During the semester, each student will be presented with 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 the students. It is important to note that, on these dates, attendance is mandatory. Skipping class for travel or other reasons will not be accepted. More details will be given on this activity as the time approaches for the first Clinical Case Review.

Important Information:

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

Tests and Final

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

Practical Information

Medical Practice & 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 Human Health and Disease. You have an obligation to your fellow classmates and yourself to come prepared to class. If you have questions or need clarification about a reading or lecture material do not hesitate to speak up and/or contact the course assistant (see contact information above). This is very important as the professors for this course do not have scheduled office hours. However in the case that a meeting is needed, please feel free to set up appointments with them via email. You can contact them, the course assistant, or program assistant Bethany Cucka, (bcu@dis.dk) to set up an appointment or to ask a question.

DIS Policies

Attendance: You are expected to attend all DIS classes when scheduled. If you miss multiple classes the Office of Academic Support will be notified and they will follow-up with you to make sure that all is well. Absences will jeopardize your grade and your standing at DIS. Allowances will be made in cases of illness, but in the case of multiple absences you will need to provide a doctor's note.

Academic Honesty: Plagiarism and Violating the Rules of an Assignment

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 (on DIS Forum), or ask your instructor if you have questions.

Disability Resources: Any student who has a need for disability accommodations should contact the office of academic support (acadsupp@dis.dk) to coordinate this. Upon DIS approval, students should inform the instructor of accommodations within the first two weeks of class.

Academic Excellence Award: Each semester we recognize one outstanding student from the Medical Practice & Policy Program with an Award of Academic Excellence. It is reserved for a student who has distinguished him- or herself through diligence, commitment, academic performance, and ideally a student who contributes to a good, collaborative learning environment in class.

Core Course Week and Study Tours

Core Course week and study tours are an integral part of the core course as we take the classroom on the road and see how theory presented in the classroom is translated to practice in the field. You will travel with your classmates and DIS faculty/staff on two study tours; a short study tour during Core Course Week and a long study tour to relevant European destinations.

Expectations for study tours:

- Participate in all activities
- Engage in discussions, ask questions, and contribute to achieving the learning objectives
- Respect the destination, the speakers, DIS staff, and your fellow classmates
- Represent yourself, your home university and DIS in a positive light

One of the learning objectives of Human Health and Disease: A Clinical Approach is for you, the student, to be able to describe medical practice in a social, international, and scientific context. The study tours are a way to achieve this learning objective.

Learning Objectives:

The objectives of both the short study tour and the long study tour are:

- 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 Denmark and other societies in Europe

While on a program study tour DIS will provide hostel/hotel accommodation, transportation to/from the destination(s), approx. 2 meals per day and entrances, guides, and visits relevant to your area of study or the destination. You will receive a more detailed itinerary prior to departure.

Travel policies: You are required to travel with your group to the destination. If you have to deviate from the group travel plans, you need approval from the program director and the study tours office.

Study Tour Assignment

Before going on the short study tour, you will be divided into groups and be given a specific subject to focus on in your study tour assignment. An observation booklet should be used on both trips for notes, these notes with which should be discussed within your group. A more in-depth description of the study tour assignment will be provided closer to the short study tour. *All parts of the assignment must be completed in order to obtain full credit for the assignment which counts toward 10% of your grade.*

Required readings

- **Hole JW:** Essentials of Human Anatomy & Physiology, 9th Edition. WC Brown Publishers, London 2004: Hole.
- **Ford MJ, Hennessey, I, and Japp, A:** Introduction to Clinical Examination, 8th Edition. Churchill Livingstone, London 2005: Ford.
- **O'Neill P, Dornan T, Denning DW:** Medicine. A Core Text with Self-Assessment. Churchill Livingstone, 3rd Edition, 2008: O'Neill.
- **Additional Readings will be posted on Canvas**

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. In some cases, where noted, skimming the reading and picking out important points will be sufficient.

Canvas

Canvas is a web-based system that allows you to access course resources and communicate with your classmates and faculty. To access Canvas, you can go to the DIS homepage and click the 'Canvas' link on the bottom of the website, or go to: <https://canvas.disabroad.org/login/canvas>. You can also download the Canvas App (By: Instructure) on iPhone and Android mobile smart phones.

Useful Links and Online Medical Dictionaries

1. Medline Plus Medical Dictionary
<http://www.nlm.nih.gov/medlineplus/medlineplusdictionary.html>
2. Medical Dictionary
<http://www.medical-dictionary.com/>
3. Medicine Net
<http://www.medicinenet.com/>
4. Inteli Health
<http://www.intelihealth.com/IH/ih/IH/WSIHW000/408/408.html>
5. UK Medical Search Engine & Health Guide
<http://www.medic8.com/index.htm>

Course Schedule

	<i>Day / Date</i>	<i>Time, Room</i>	<i>Title</i>	<i>Read</i>	<i>Lecturer(s)</i>
Wednesday, August 23 Medical Practice & Policy Program Orientation 14:50-16:10 Kosmopol, Fiolstræde 44, 1171 København K (see arrival booklet)					
1	Friday, August 25	15.30-17.30 Aud D *meet CA in Vestergade 7 courtyard at 14:35 for departure to Glostrup Hospital	Lecture 1 Introduction and Course Overview <ul style="list-style-type: none"> - Presentation of the course and the introduction of faculty and students - Introduction to Theoretical Patient - Cases (TPC) 	Ford 1-55 (skim) + lecture notes on Canvas **Ford can be found on Canvas**	Marie, Sabrina, Casper
2	Tuesday, August 29	15.30-17.30 Aud D	Lecture 2 Clinical signs and symptoms, paramedical tests <ul style="list-style-type: none"> - Physical examination, understanding signs and symptoms, structure of medical records. 	Ford chapter 1 & 3 + pages 15-18	Sabrina
	Friday, September 1		<i>Reserved for make-up class if necessary</i>		
	Tuesday, September 5		<i>Reserved for make-up class if necessary</i>		
	Friday, September 8		<i>Reserved for make-up class if necessary</i>		
	Wed 06/09	17.30-19.00 DIS, V23-301	Mandatory Core Course Week & Study Tour Orientation	The Danish Healthcare system (On Canvas) WHO Health Systems in Transition Executive Summary Only (On Canvas)	S&H Department
Medical Practice & Policy (MPP) Program Social Friday, September 8 18:00-20:00 Location: TBA <i>*Get to know your MPP peers before CCW with some light snacks & drinks*</i> <i>More information provided a week before</i>					

<p align="center">Core Course Week Short Study Tour: Århus/Randers Monday, September 11-Wednesday, September 13</p> <p align="center">Copenhagen Portion Thursday, September 14 – Friday, September 15 (ends at 18:30)</p> <p align="center">**Please note that it is mandatory to attend all scheduled core course week activities**</p>					
3	Friday, September 15	15.00-17.30 Aud D	<i>Lecture 3</i> GI System I <ul style="list-style-type: none"> - Anatomy & Physiology - Diagnostic and treatment methods Clinical Patient Case 1	Ford: pp. 19-20, 25-26, 28-29, 32, 34, 98-116 O'Neil 117-120, 151-152, Holes chapter 15	Sabrina
4	Tuesday, September 19	15.30-17.30 Aud D	<i>Lecture 4</i> GI System II <ul style="list-style-type: none"> - Gastric and duodenal ulcers - Inflammatory bowel disease - Colorectal cancer 	O'Neil: 122-134	Sabrina
5	Friday, September 22	15.30-17.30 Aud D	<i>Lecture 5</i> CNS 1 <ul style="list-style-type: none"> -Anatomy and physiology -Most frequent disease entities -Diagnostic and treatment methods Clinical Patient Case 1 due (upload to Canvas by 15:30)	Hole's: Chapter 9 Ford: Chapter 7	Casper
6	Tuesday, September 26	15.30-17.30 Aud D	<i>Lecture 6</i> CNS II	Ford: Chapter 7 O'Neill: Chapter x	Casper
7	Friday, September 29	15.30-17.30 Aud D	<i>Lecture 7</i> Psychiatry <ul style="list-style-type: none"> - Affective mood disorders - Suicide - Eating disorders - Schizophrenia and delusional disorders Clinical Patient Case 2	Davidson's Principles and Practice of Medicine, chapter 8, pgs. 246-269 (Medical Psychiatry)	Casper
	Monday, October 2	Fact Sheets & Preliminary Research Question Due By 16.00 to Canvas			
8	Tuesday, October 3	15.30-17.30 Aud D	<i>Lecture 8</i> Infections I	O'Neil: 77, 408-410, 425-426, 429-431	Sabrina

9	Friday, October 6	15.30-17.30 Aud D	<i>Lecture 9</i> Infections II Clinical Patient Case 2 due (upload to Canvas by 15:30) Test I	O'Neil: 78-79, 219-220, 418, 421, 421-425	Sabrina
<u>Long Study Tour: Poznan / Berlin</u> Sunday October 9 – Friday October 13					
10	Tuesday, October 17	16:00-19:30 Gentofte Hospital Simulation & Training Center *Note time and location change*	<i>Lecture 10</i> Clinical Skill Session Introduction to clinical skills: IV insertion, Catheter insertion and Suture **Course Assistant will establish a meeting time and place**	On Canvas	DIS Clinical Instructors
11	Friday, October 20	15.30-17.30 Aud D	<i>Lecture 11</i> Respiratory System I -Anatomy and physiology -Clinical examination of the lungs	Hole's chapter 16 O'Neill pgs. 69-93, 98-99	Marie
13	Tuesday, October 24	15.30-17.30 Aud D	<i>Lecture 13</i> Respiratory system II Clinical Patient Case 3	Hole's chapter 16 O'Neill pgs. 69-93, 98-99	Marie
13	Friday, October 27	15:30-17:30 Aud D	<i>Lecture 13</i> Headache	Ford: Page 30	Casper
Break Monday, October 30 – Friday, November 3					
14	Tuesday, November 7	16:30 – 20:30 Herlev Hospital 25 th Floor *Note time and location change*	<i>Lecture 14</i> Emergency Medicine Simulation Session Clinical Patient Case 3 due (upload to Canvas by 15:30) **Meet CA at 15:30 at designated location**	See Canvas Page	DIS & CAMES Instructors
Study Tour Assignment Due By 16.00 to Canvas					
15	Friday, November 10	15.30-17.30 Aud D	<i>Lecture 15</i> Cardiovascular system I	Hole's: Chapter 13 O'Neill: pages 7-36	Marie
16	Tuesday, November 14	15.30-17.30 Aud D	<i>Lecture 16</i> Cardiovascular system II	Hole's: Chapter 13 O'Neill: pages 7-36	Marie

17	Friday, November 17	15.30-17.30 Aud D	<i>Lecture 17</i> ER I Test II	Ford 169-171, O'Neil 7-11, 69-74, 98	Marie
18	Tuesday, November 21	15.30-17.30 Aud D	<i>Lecture 18</i> ER II	Ford 169-171, O'Neil 7-11, 85-89, 225-227	Marie
Break Wednesday, November 22 – Friday, November 24					
	Tuesday, November 28	15.30-17.30 Aud D	<i>Reserved for make-up class if necessary</i>		
	Friday, December 1	15.30-17.30 Aud D	<i>Reserved for make-up class if necessary</i>		
19	Tuesday, December 5	15.30-17.30 Aud D	<i>Lecture 19</i> Final Class Wrap up, tying it together Preparation for the final & Concluding Social	N/A	All
Thursday, December 7 DIS End of Semester Showcase Time: 16:00-18:00 Location: DIS Invitation and more information to come closer to date.					
Final Exam Final Exam Period: Thursday December 7 – Sunday December 10 Location: DIS <i>Exact Date & Time of Human Health & Disease: A Clinical Approach Final Exam provided closer to.</i>					