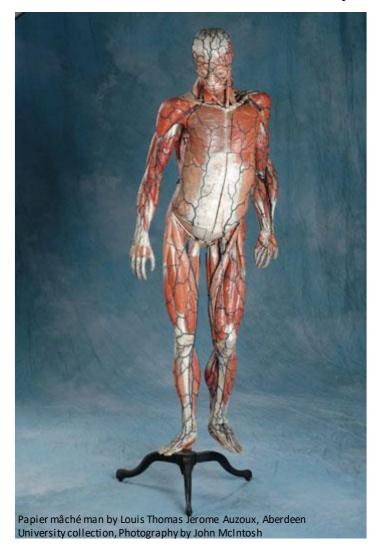


Year 3 MBChB
Medical Humanities Student Selected Components



## ME33HA Human Anatomy with Historical, Cultural and Social Dimensions 30 Credits

Winter Term 2020

**Course Coordinator:** 

Dr Shahida Shahana

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# ME33HA Human Anatomy Dissection with Historical, Cultural and Social Dimensions

## 30 Credits

Monday 26<sup>th</sup> October – Friday 4<sup>th</sup> December 2020 (6 weeks)

Year 3 MBChB Medical Humanities Block Organiser: Dr Leeanne Bodkin Tel: 01224 43 7723

Email: leannebodkin@abdn.ac.uk

## **Course content**

Course content	2
Course Summary	3
Timetable	
Table3: Summary of deadlines	
Plan of programme	
Assessments	
Staff List for the Course	17
Museum and DR opening hours	Error! Bookmark not defined
Reading List and Other Learning Aids	18
The Anatomy Act	Error! Bookmark not defined
Safety and Security	Error! Bookmark not defined

## **Course Summary**

ME33HA is a practical anatomy course that explores gross human morphology and its functional correlation in historical, social and cultural dimention. The main methods for student learning are self-directed dissection based activities and library work. The historical place of Anatomy and medicine in Society is explored through a short series of lectures/discussions.

ME33HA is a 30 credit course within the Year 3 Medical Humanities Block

## **Course Learning Outcomes**

## Knowledge:

- A detailed knowledge of the topographical anatomy of a human body. Relating basic medical science (Anatomy) to clinical practice.
- An in-depth knowledge of a specific region of anatomy in relation to a known clinical procedure, or the development of that procedure.
- Develop an understanding of the historical evolution of Anatomy and medicine and its intercalated connection with history, art, archaeology, and sociology.

## Generic skills to increase future employability:

- Development of both team, and independent working skills.
- Time-management, data acquisition and disseminate the data into a presentation and mini-review writing.
- PowerPoint presentation preparation in a format suitable for scientific or medical professional societies.
- Develop information retrieval and IT skills.
- Work as part of a team towards stated objectives in a safe and constructive manner to reach the goal.

## **Timetable**

The whole class will meet in the blackboard collaborate meeting room in MyAberdeen, at 10:30 am on the first Monday of the course (26<sup>th</sup> October), where the course coordinators will describe the structure and content of the course, and the assessments.

Individual students are responsible for their own timetable with the exception of the compulsory lecture schedule, with the following provisos:

- An overall commitment of <u>300 hours</u> is expected in the form of learning human anatomy (virtual), background library work, tutorials and talks, preparation of submitted work.
- Students will be required to attend at given times to give oral presentations, and to attend lectures/discussions.
- Deadlines for assessed work and other written statements are given below and must be adhered to.
- You are advised to use images for your presentation from our recommended anatomy books. E.g. Essential Clinical anatomy of Moore. Anatomy.TV images are downloadable and you are allowed to use those.

**Table1. Lecture timetable** 

Lecture	Date	Week	Time	Lecturer	Email address	Venue
Course Introduction	26/10/20 Monday	Week- 1	10:30- 11:30	Dr Shahida Shahana	s.shahana@abdn.ac.uk	BC meeting room, MyAberdeen (Live session)
"Anatomy Act 1832 & dissecting the destitute" and "Sir John Struthers"	28/10/20 Wednesday	Week- 1		Dr Dee Hoole	deehoole@abdn.ac.uk	Recorded video lecture
Live discussion on the project proposal and how to structure the "mini- historical review"	02/11/20 Monday	Week- 2	10:30am- 11:30am	Dr Shahida Shahana	s.shahana@abdn.ac.uk	BC meeting room, MyAberdeen (Live session)
Art and Anatomy - Vesalius	04/11/20 Wednesday	Week- 2		Dr Leeanne Bodkin	leeannebodkin@abdn.ac.uk	Recorded video lecture and
Anatomy, Anthropology and Archaeology: The formation and legacy of the University's museum collections	04/11/20 Wednesday	Week- 2	10:30am- 11:30am	Mr Neil Curtis	neil.curtis@abdn.ac.uk	Recorded video lecture and BC meeting room, MyAberdeen (Live Q and A session)
Live discussion on structuring the "Group Presentation"	09/11/20 Monday	Week- 3	10:30am- 11:30am	Dr Shahida Shahana	s.shahana@abdn.ac.uk	BC meeting room, MyAberdeen (Live session)
The early beginnings of medical treatment: An archaeological perspective	11/11/20 Wednesday	Week- 3		Dr. Flora Groening	f.groening@abdn.ac.uk	Recorded video lecture
Friends, enemies, ancestors and demons? An archaeology of the human head	11/11/20 Wednesday	Week- 3	10-11	Dr Rebecca Crozier	rebecca.crozier@abdn.ac.uk	Recorded video lecture
Q and A session on "Grants Dissection Video Library"	16/11/20 Monday	Week- 4	10:30am- 11:30am	Dr Shahida Shahana	s.shahana@abdn.ac.uk	BC meeting room, MyAberdeen (Live session)
Neuroanatomy and art	18/11/20 Wednesday	Week- 4		Mr Pragnesh Bhatt	pragnesh.bhatt@nhs.net	Recorded video lecture
Scalpels, Snakes and Skulls- A short History of Surgery	18/11/20 Wednesday	Week- 4	11:00am- 12:00pm	Professor David William Sinclair	dws1@st-andrews.ac.uk Royal College of Surgeon of Edinburgh	BC meeting room, MyAberdeen (Live session)

Final Q and A	23/11/20	Week-	10:30am-	Dr Shahida	s.shahana@abdn.ac.uk	BC meeting	l
session on	Monday	5	11:30am	Shahana		room,	l
"Group						MyAberdeen	l
Presentation"						(Live session)	l
draft							l

## **External lectures to attend:**

### **ME33AM 2020**

These are a series of artist talks taking place in the fine art and medicine course that we recommend you to Join the first two lectures below which are relevant to ME33HA. The format will be a presentation by the artist of their work and then Q&A. Guest link;

https://eu.bbcollab.com/guest/32caddf4ed8b425abc8892ec07cd4620

- 1. Jo MacDonald is speaking on 6th Nov at 2pm.
- 2. And Skye Reynolds and Susan worsford who are in residency at city moves in old anatomy rooms and produced ALIVE a dance performance that took place in the anatomy lecture theatre in dance live last year. They are speaking on 30th Nov 2pm.

## LIVE

06/11/2020	Friday	artist talk - Jo MacDonald	14.00-15.00
13/11/2020	Friday	artist talk - Brian Keeley <a href="https://briankeeley.wordpress.com/">https://briankeeley.wordpress.com/</a>	14.00-15.00
20/11/2020	Friday	artist talk - Skye Reynolds /Susan Worsford https://skyereynolds.com/ https://www.openroadltd.com/portfolio/alive/	14.00- 15.00
16/11/2020	Monday	artist talk - Beverley Hood https://www.bhood.co.uk/	11.00-12.00
25/11/20	Weds	artist talk - Marilene Oliver https://marileneoliver.com/	17.00-18.00

## **Table3. Summary of deadlines**

## **Summative Assessment Deadlines:**

Assessment	Weigh	Week	Week	Week	Week	Week-5	Week-6
S	t	-1	-2	-3	4		
Anatomy	15%	yes	yes	yes	yes	yes	
Online *ICAs						All	
(MCQ)						Anatomy	
						ICA to be	
						complete	
						d by	
						Friday	
						27/11/20	
						By 5pm	
Presentation	25%						02/12/20
(online-live							Wednesday
session)							(time TBC)
Mini -	60%						04/12/20
historical							Friday
review							(By 5pm)
submission							Turnitin submission
							and please email a
							copy to Dr Shahana.
							email:
							s.shahana@abdn.ac.u
							k

<sup>\*</sup>ICA= in course assessment, flexible and all could be completed by week 5 (Friday 5pm, UK time) but we recommend you complete ICAs on a weekly basis to avoid any backlog. There are three regional anatomy blocks (Upper Limb, Lower Limb, Back and Spine) that will run from week-1 to week-5 and you need to choose two regional anatomy blocks out of three. There are five short weekly ICA per anatomy block. Each ICA (10 mins for 10 MCQ) weight 1.5% of total exam weight.

## **Formative Assessment Deadlines:**

Assessments	Weight	Week-1	Week-2	Week-3	Week4	Week-5	Week-6
*Mini- historical review and a presentation (on a different topic) project proposal submission	0		06/11/20 Friday By 5pm, UK time email: s.shahana@abdn.ac.uk				
Group Presentation draft ready (for live discussion)	0					23/11/20 Monday 10:30am	

## Plan of programme

## 1. Regional Anatomy-1 and 2:

Assessed – contributes 15% of total marks available: 7.5% for Regional Anatomy-1, 7.5% for Regional Anatomy-2. Each block has 5 short in course assessments (ICAs) and each contributes 1.5%. These are 10 mins, short online MCQ based weekly assessments but could be completed flexibly by Friday of week-5, 5pm. There are three Regional anatomy blocks and you will be able to choose two out of these three blocks:

- 1. Upper Limb
- 2. Lower Limb
- 3. Back and Spine

## 2. Group PowerPoint Presentation:

Assessed – contributes 25% of total marks available

Historical anatomical model/topics chosen from historical lecture series.

You will prepare and deliver a 10 minute group PowerPoint presentation on historical anatomical models/a topics chosen from historical lecture series.

### 3. Historical mini-review:

Assessed – contributes 60% of total marks available

Preparation of a short historical review (3500 words excluding references and titles and tables/figure legend) of a clinical procedure, discovery, or historical research and interest related to the area of evolution of medicine. This review should highlight relevant regional anatomy structures.

## 4. Short lecture/discussion programme, including external speakers.

These lectures (and anatomical models) should correlate with your presentation topic.

<sup>\*</sup> Mini-historical review and a presentation (on a different topic, recommended to choose from the lecture series topics/historical anatomical models) project proposal topics will be discussed on the live (onlie) introductory session on 26/10/20.

## Regional Anatomy-1 and 2 ICA completion

Regional anatomy-1 and regional anatomy-2, presentation and minireview activities will occupy most of the first 4-5 weeks of the course. Regional anatomy-1 and regional anatomy-2 have 5 short weekly in course assessments (ICAs) in each block which must be completed by the last Friday of week-5 (27-11-2020, 5pm). You are expected prepare a timetable to carry out approximately 6 hours activity per day on preparative reading for regional anatomy ICAs/historical literature review/review writing/presentation preparation. At all times you should compare the progress of your own work with the members of your group. Please watch Grants Library of cadaveric dissection videos together with other virtual anatomy resources to prepare for ICAs.

## **Project proposal submission:**

You are required to submit a short 300 word description of your proposed individual historical mini-review, for approval by 06/11/2020, 5pm by email to Dr Shahana. You should also email the topic of your short presentation project by 06/11/2020.

## Preparation of PowerPoint presentation of a short anatomically relevant historical project:

You are required to prepare a PowerPoint presentation illustrating either historical anatomical models or a topic chosen from the historical lecture series.

You can choose an historical model from the Anatomy Collection (online image and information will be provided). You should highlight the model in historical context and may be descriptive about the maker; the materials of construction, the functional purpose of the model may have had at the time of its production or any other interesting information that can be associated with the model. Please add a reference list in your last slide.

There is no predetermined structure and you should feel free to present the material in the way that you feel best illustrates your work. Dr Shahana will give a talk on "Presentation skills and how to prepare a good talk" in week-3. This will be live online group presentation in blackboard collaborate meeting room.

However, it should be aimed at your target audience which in this case is a <u>meeting of a national scientific/medical professional society.</u>

In order for everyone to comply with the above it will be necessary to complete this part of the work in good time and by regular consultation with Dr Shahida Shahana and the technicians to obtain their assistance, and sufficient user time on the computers. You

should therefore aim to prepare your illustrations as you go along.

## Preparation of a historical mini-review (3500 words) of a clinical topic:

## 1. .

Writing succinct reports is an everyday skill for practicing medical professionals. The aim of this part of the assessment is to get you to relate your anatomy knowledge with a historical/recent clinical procedure to expand your lateral vision on how evolution of anatomy and medicine happened and contributed to improve patient care.

You are free to interpret this widely but you must highlight your clinically relevant historical topic to your regional anatomy where possible. Try not to exceed the word limit.

This mini-review is expected to be well researched in the library or using other proper sources of information and should be referenced. We encourage you to read as many papers/books as possible. There is no cap on the references. The aim is not to create a straight up modern day report on a clinical procedure. Rather develop an ability to look through past, present and future to understand how evolution of anatomy and medicine happened and contributed to improve patient care. Also, try remember your regional anatomy knowledge from the dissection video library and other virtual resources and think its importance in evolution of medicine.

You should give some thought to the topic of your essay before you finally decide. You should consider the topic and do at least some preliminary background reading during the first two weeks of the course.

## 2. Short lecture/discussion programme. (Recorded lectures/Live lecture/Live/Q and A)

## 1. The Anatomy Act 1832 and Dissecting the Destitute

Dr Dee Hoole, University of Aberdeen

Dissection is very much part of the history of medicine, and it is useful to understand the part played in this history by the Anatomy Act (1832) and the role of the Inspector of Anatomy - since this Act remained in force for almost 150 years. The working of the Act in Scotland differed somewhat from the rest of Britain, Funeratories were established in Edinburgh, Glasgow and Aberdeen which enabled a relatively smoother operation than elsewhere. However, there were disputes, controversies and scandals concerned with the dissection of subjects - most of whom were unclaimed bodies sourced from Poor Law institutions.

Richardson, R., Death, Dissection and the Destitute (London: Phoenix Press, 2001) 2nd Ed.

Hurren, E.T., 'A Pauper Dead-House: The Expansion of the Cambridge Anatomical Teaching School under the Late-Victorian Poor Law, 1870-1914', Medical History, 48, 2004, pp. 69-94.

Hutton, F., 'Medicine and Mutilation: Oxford, Manchester and the impact of the 1832 Anatomy Act', Wellcome History, 29, Summer 2005.

### 2. Sir John Struthers

Dr Dee Hoole, University of Aberdeen

John Struthers(1823-1899) was the first Regius Professor of Anatomy at the University of Aberdeen. Prior to that he had been a Lecturer in Anatomy at the University of Edinburgh. Amongst other things, he was a visionary in medical education, writing guidelines to students on how to learn their anatomy whilst at Edinburgh, designing the Anatomy facility at Marischal College, Aberdeen, and later becoming the first Chairman of the GMC Medical Education Committee.

## 3. Anatomy and Art - Vesalius

Dr Leeanne Bodkin, University of Aberdeen

The lecture will briefly consider ancient medicine, and particularly Galen of Pergamum (c129–c210 AD). Some aspects of Galen's system remained influential in medical thought and practice as late as the Nineteenth Century. By then, however, much of Galen's understanding of anatomy had been revised, following the rise of anatomical study from the fourteenth century onwards. The first public human dissections were carried out at the Bologna medical school, around 1315. The key figure who will be considered in this lecture is Andreas Vesalius (1514–1564), who published the famous anatomical text De Humani Corporis Fabrica in 1543.

## 4. Anatomy, Anthropology and Archaeology: the formation and legacy of the University's Museum Collections.

Mr Neil Curtis, University of Aberdeen

The University's museum collections originated in collections of curiosities and teaching material in both King's and Marischal Colleges. Following the fusion of the colleges and the development of disciplinary collections, at the turn of the 20<sup>th</sup> century the professor of Anatomy created the University's Anthropology Museum alongside the Anatomy Museum. Focusing on the museum, this lecture will

consider what this museum reveals about the role of a museum one hundred years ago and what are the legacies of this museum.

## 5. The early beginnings of medical treatment: an archaeological perspective Dr Flora Gröning, University of Aberdeen

Text documents are an invaluable source of information about the history of medicine, but they are available only from the Antiquity onwards, and they do not tell us the whole story. What can archaeological finds and human remains tell us about the early history of medicine?

Hardy, K. et al. (2012). Neanderthal medics? Evidence for food, cooking, and medicinal plants entrapped in dental calculus. Naturwissenschaften **99**: 617-626.

Weber, J. & Wahl, J. (2006). Neurosurgical Aspects of Trepanations from Neolithic Times. International Journal of Osteoarchaeology **16**: 536-545.

## 6. 'Friends, enemies, ancestors and demons? An archaeology of the human head Dr Rebecca Crozier, University of Aberdeen

3D Anatomical models: histories and current uses (notes and documents provided by Dr Elizabeth Hallam, University of Aberdeen and University of Oxford

## 7. Neuroanatomy and Art

Mr Pragnesh Bhatt, NHS Grampian, Aberdeen

Neuroanatomy has been studied in detail since centuries not only by anatomists but also by others with varying interests. There is a strong connection between Renaissance artists and neuroanatomy and the author would like to explore this in detail. Four different European artists' work with regard to neuroanatomy has been studied in detail and examples with interesting findings selected to highlight their understanding. Its correlation in life outside medical science is also exhibited. Most fascinating facts are revealed as we study their work. The evolution of our knowledge about neuroanatomy is traced back to Renaissance. Neuroanatomy has been the subject of interest for longtime and understanding it from a different perspective is intellectually stimulating.

## 8. 'Scalpels, Snakes and Skulls - A Short History of Surgery'

Professor David Sinclair, Royal College of Surgeon of Edinburgh

This lecture briefly reviews the early history of Surgery, from prehistoric times to the era of Lord Lister in the late nineteenth century.

Particular emphasis is laid upon exploring the close, continuing link between the development of anatomical knowledge and that of surgical practice.

The lecture also considers the professional and personal qualities which characterised the major historical figures involved, especially as expressed through their recorded aphorisms (pithy observations which contain a general truth).

## **Resources/References about Anatomical Models:**

These references will help you to find key papers with information on introduction to the interpretation of 3D models in historical studies of science and medicine. These papers will give an overview of developments in anatomical modelling, and a brief history of the University of Aberdeen's models, since the mid nineteenth century.

Try to reveal importance of using models as historical sources, how models were produced and used in the past; relating models to historical contexts; and making old models relevant in present-day anatomical and medical education.

## **Reading list**

Hallam, Elizabeth, 2016, Anatomy Museum, Death and the Body Display.

Edited by JMM Alberti and Elizabeth, Medical Museums, Past, Present, Future.

Chadarevian, Soraya de, and Nick Hopwood. 2004, Models: The Third Dimension of Science. Stanford.

Hackethal, Sabine, 2008, "The Blaschka Models of the Humboldt University of Berlin and their Historical Context," Historical Biology 20 (2008): 19–28.

Hallam, Elizabeth, 2013, 'Disappearing Museums? Medical Collections at the University of Aberdeen', in Samuel J.M.M. Alberti and Elizabeth Hallam, Medical Museums: Past, Present, Future, London: Royal College of Surgeons of England, pp.44-59.

Hopwood, Nick, 2002, Embryos in Wax: Models from the Ziegler Studio. Cambridge and Bern.

Hopwood, Nick, 1999, "'Giving Body' to Embryos. Modeling, Mechanism, and the Microtome in Late Nineteenth-Century Anatomy," Isis 90 (1999): 462–96.

Maerker, Anna, 2013, 'Anatomizing the Trade: Designing and Marketing Anatomical Models as Medical Technologies, ca. 1700-1900', Technology and Culture, 54(3): 532-562.

## **Assessments**

The assessment for this course has 3 components:

## 1. Regional Anatomy-1 and 2 (short MCQ based online assessments) – 15%

7.5% (Regional Anatomy-1)

7.5% (Regional Anatomy-2)

Each regional anatomy block has five short weekly (10 mins for 10 MCQ per weekly exam) in course assessments (each contributes 1.5% weight). These can be completed flexibly when it suits you. However, It is recommended that you complete your weekly ICAs each week to prevent any backlog.

Submission date: 27-11-20, 5pm, Friday

## 2. PowerPoint presentation - 25%

This part of the assessment must be presented live online (BC meeting room).

The presentation overall will last 15 minutes, the actual presentation should last 10 minutes, and the remaining 5 minutes for questions from the audience (ME33HA students/anatomy tutrs). Marks for presentation will include an assessment of:

- Overall content
- Clarity of content
- Appropriate use of text
- Appropriate use of photographs, diagrams, tables etc
- Correct labelling of photographs, diagrams, tables etc
- Neatness of presentation to include layout, font size, size of illustrations etc.
- Presentation style
- In depth research done on the topic (by literature search)

Presentation: Last Wednesday of Week 6

## 3. Historical Review Essay (3500 words) – 60%

This part of the assessment must be submitted via email and Turnitin submission. Try not to exceed the 3500 word limit. The title and references are exempt from this limit. It is expected that not many references should be from general textbook but from literature review, showing evidence of deep background reading. Only one mark will be awarded but this will include an assessment of:

- Structure of the review
- Clarity of presentation
- Evidence of in-depth background reading

- Novelty of approach
- Well referenced

## Presentation of your essay:

- Word processed in MicrosoftWord
- Arial or Calibri, 12 point
- 2.5 cm margins all round
- 1.5spacing
- Pages numbered

Submission date: last Friday of course

## **Staff List for the Course**

Staff	Department/School	Telephone	E-mail
Dr Shahida Shahana	Course coordinator	01224 274317	s.shahana@abdn.ac.uk
Professor Simon Parson	Professor of Anatomy	01224 437775	simon.parson@abdn.ac.uk
Aggie Kruk-Omenzetter	Anatomy Administrator	01224 274320	a.kruk- omenzetter@abdn.ac.uk
Dr Leeanne Bodkin	Medical Humanities organiser	01224 437723	leeannebodkin@abdn.ac.u k
Dr Flora Gröning	Department of Anatomy	01224 274322	f.groening@abdn.ac.uk
Mr Neil Curtis	Head of Museums	01224 274304	neil.curtis@abdn.ac.uk
Dr Dee Hoole	Department of History		deehoole@abdn.ac.uk
Dr Rebecca Crozier	University of Aberdeen		rebecca.crozier@abdn.ac.u <u>k</u>
Mr Pragnesh Bhatt	NHS Grampian		Pragnesh.bhatt@nhs.net
Professor David William Sinclair	Royal College of Surgeon of Edinburgh		Dws1@st-andrews.ac.uk

## **Plagiarism**

The written work which forms parts of the assessment for this course is subject to the standard university rules (and punishments) for plagiarism. You should already be familiar with these but if not you should seek guidance from the course coordinator. The limitations imposed for the poster demonstration and historical review may not allow full referencing of all background information but you should ensure that your style of writing does not imply undue originality. Copying of large chunks of text is plagiarism, whether or not it is referenced.

## **Reading List and Other Learning Aids**

Books: There is no requirement to purchase any additional Anatomy textbooks.

The following textbook is the recommended text for Phase 1.

"Essential Clinical Anatomy" by Keith L. Moore (6<sup>th</sup> edition) and Anne M.R. Agur, 3rd edition, 2006, published by Williams & Wilkins. ISBN 0-7817-6274-X

The above text is a valuable refresher text but in order to broaden your understanding of the subject, you should refer to additional texts. A small collection of books is available for students' use in Anatomy, Suttie Centre. These books must not be removed from the Anatomy Facility.

There are a number of photographic anatomical atlases available in the department and library which may be of great use, i.e. McMinns or Gosling.

The main dissection guide to be used is **"Grant's Dissector" by EK Sauerland**. 12<sup>th</sup> edition, published by Lippincott Williams & Wilkins. ISBN 0-683-30739-8. These are available for use in the Anatomy Building.

**Grant's Dissector, Fifteenth Edition, by Patrick W. Tank**. A beautiful concise dissection book and you can be benefitted by reading each chapter before you come to dissect. Other dissection guides are available in the department and should also be referred to.

## Anatomy on the Web

The following websites may be of use:

- http://www-sci.lib.uci.edu/~martindale/MedicalAnatomy.html
- http://www.kumc.edu/instruction/medicine/anatomy/histoweb/
- http://www.medicalstudent.com
- http://www.anatsoc.org.uk/ on this site follow "links" then scroll down to find "education related sites"