A close-up of a logo

Description automatically generated with low confidence



*BM2509- Human Anatomy B*

*Course Handbook 2023-2024*

*Undergraduate Medical Sciences*

*School of Medicine, Medical Sciences & Nutrition*

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# Course Summary

BM2509 is restricted to students registered for the BSc in Biomedical Sciences and can be taken only by students who have completed BM2009. BM2509 is a practical anatomy course that explores gross human morphology and its functional correlation. The main method for student learning is supervised self-directed prosection based practical sessions.

The course will consist of:

1. An introductory lecture with course information
2. Short lecture/tutorial every Tuesdays
3. Recorded talks and online quizzes
4. Weekly practical classes
5. Four in-course summative assessments

All work carried out in Anatomy at the University of Aberdeen involving the use of human cadaveric material is carried out under The Anatomy Act 1984 as amended by The Human Tissue (Scotland) Act (2006) and its regulations.

Under The Act, human cadaveric material may only be used in premises that are licensed for the purpose and by people with an interest and need to study the material.

Under The Act, its Regulations and Code of Practice, and local rules, you are:

1. Not allowed to be in possession of human cadaveric material outside of premises licensed under The Act,
2. Not allowed to bring any friends/relatives into the Anatomy Department irrespective of their background and interests,
3. Not allowed to take photographs or any form of electronic image of human cadaveric material,
4. Required to properly respect the human cadaveric material donated for your study.

You are advised that any breaches to the above will make you liable for University disciplinary procedures and, in addition, may be a criminal offence under The Act.

If you have any specific queries regarding the Anatomy Act and regulations/rules around studying in the Anatomy Facility, then you should contact Prof Simon Parson or Dr Asha Venkatesh, Licensed Teacher of Anatomy.

# Course Aims & Learning Outcomes

**What you will be expected to know**

The information students will learn is broadly based and covers all regions of the body (e.g. Pelvis and perineum & Head and Neck & brain) and functional systems (e.g. reproductive system, nervous system).

NB Some regions and systems were covered in the BM2009 course, Human Anatomy A, which took place in Semester 1.

Thus, students are expected to have a wide knowledge of the human body, concentrated on the details of how the structures you study enable function. The course will foster in students the development of anatomical and generic skills. Anatomical skills are objectives for learning that result in your being able to carry out or demonstrate an action or display a structure.

A series of Learning Outcomes is bulleted under the summary of each region of the body. These outcomes form the basis of the factual component of the assessment of BM2509 - know them, and the detail they relate to, because you will be questioned on them.

**What you will be expected to do**

* The codes of conduct and safety instructions for the Anatomy Facility are laid out later in this course manual or on MyAberdeen - READ THEM. Failure to follow them may result in your removal from the class list.
* You are required to attend all classes. A medical certificate must be provided to cover any absences. You must sign the register at each class. Failure to comply with this may result in you being removed from the class list and unable to sit the end of course examination.
* Read your recommended textbook, 'Essential Clinical Anatomy’. This textbook forms an integral part of the learning resources of this course. Other texts should be referred to broaden your understanding of the topic.
* Keep up with the work - experience indicates that a failure to keep on top of your learning has serious consequences for the examination outcome. If you do not understand something, ask for help as soon as you can. Course Learning Outcomes

The overall objectives (below) should be attained by the end of the series of practical’s and are what you should be able to do. They are to:

* Name and describe, in standard terms, anatomical planes and relations and the gross anatomical components of the human body and explain their function.
* Describe the location of functional systems in the regions of the body.
* Demonstrate anatomical skills, in particular be able to point out surface markings of internal organs and structures and explain their significance.
* Begin to identify the spectrum of usual variation of normal human structure and function and how this relates to abnormality.
* Explain the two-dimensional projection of structures on radiographic images.
* Develop transferable skills such as teamwork, IT and problem-solving skills.

As far as the BM2509 course is concerned, the above objectives refer to the following regions of the body: the pelvis and perineum, head, neck and brain. (The BM2009 course, in Semester 1, covered back, upper and lower limbs, thorax and abdomen).

# 

Course Teaching Staff

Course Co-ordinator:

Dr Prem Ballal, School of Medicine & Dentistry: [p.ballal@abdn.ac.uk](mailto:p.ballal@abdn.ac.uk)

Please use the discussion board on the course homepage on my aberdeen and practical classes to ask questions about the course content. For any personal or private queries, contact the course co-ordinator via email or approach them at the end of the practical class

**Course Administrator:**

Ms Agnieszka (Aggie) Kruk-Omenzetter (Anatomy Administrator),

Email: a.kruk-omenzetter@abdn.ac.uk

Assessments

Students will be required to pass the whole course – i.e. a total composite mark, based on the continuous summative assessment components as specified below, of 9 or above on the University of Aberdeen common grading scale (CGS) will give 15 credits. Students should assess their own progress by self-testing their attainment of the learning objectives and by realistically interpreting the results of online quizzes.

Pelvis and Perineum summative assessment – 25%

Head and Neck 1-4 summative assessment – 25%

Head and Neck 5-7 summative assessment – 25%

Brain and spinal cord summative assessment – 25%

(Continuous assessment: 100% of total assessment)

All four continuous assessments are in-course assessments and it will be in our anatomy facilities using our cadaveric specimen and models. They will include MCQ as well as ‘spotter’ type questions which will ask you about a labelled/pinned structure in an image, model or in a cadaveric specimen. Your course coordinator will provide further details during the course induction and via the FAQ on the course homepage on My Aberdeen.

Students who attain an overall mark for the course of 8 or less on the CAS will fail the course. A resit diet will be held in June/ July.

Class certificates will be valid for 2 years and permit a total of three attempts at the required assessment within that two-year period i.e. the first attempt plus up to two resits.

Class Representatives

We value students’ opinions in regard to enhancing the quality of teaching and its delivery; therefore, in conjunction with the Students’ Association we support the Class Representative system.

In the School of Medicine, Medical Sciences & Nutrition we operate a system of course representatives, who are elected from within each course. Any student registered within a course that wishes to represent a given group of students can stand for election as a class representative. You will be informed when the elections for class representative will take place.

What will it involve?

It will involve speaking to your fellow students about the course you represent. This can include any comments that they may have. You will attend a Staff-Student Liaison Committee and you should represent the views and concerns of the students within this meeting. As a representative, you will also be able to contribute to the agenda. You will then feedback to the students after this meeting with any actions that are being taken.

Training

Training for class representatives will be run by the Students Association. Training will take place within each half-session. For more information about the Class representative system visit [www.ausa.org.uk](http://www.ausa.org.uk) or email the VP Education & Employability [vped@abdn.ac.uk](mailto:vped@abdn.ac.uk) . Class representatives are also eligible to undertake the STAR (Students Taking Active Roles) Award with further information about this co-curricular award being available at: [www.abdn.ac.uk/careers](http://www.abdn.ac.uk/careers).

Problems with Coursework

If students have difficulties with any part of the course that they cannot cope with, alone they should notify the course coordinator immediately. If the problem relates to the subject matter general, advice would be to contact the member of staff who is teaching that part of the course. Students with registered disabilities should contact the medical sciences office, ([medsci@abdn.ac.uk](mailto:medsci@abdn.ac.uk)) (based in the Polwarth Building, Foresterhill) to ensure that the appropriate facilities have been made available. Otherwise, you are strongly encouraged to contact any of the following as you see appropriate:

* Course student representatives
* Course co-ordinator
* Convenor of the Medical Sciences Staff/Student Liaison Committee (Professor Gordon McEwan)
* Personal Tutor
* Medical Sciences Disabilities Co-ordinator (Dr Derryck Shewan)

All staff are based at Foresterhill and we strongly encourage the use of email or telephone the Medical Sciences Office. You may have a wasted journey travelling to Foresterhill only to find staff unavailable.

If a course has been completed and students are no longer on campus (i.e. work from second half session during the summer vacation), coursework will be kept until the end of Fresher’s Week, during the new academic year. After that point, unclaimed student work will be securely destroyed.

# Course Reading List

**Text** Books -

The purchase of an Anatomy textbook is considered essential for all students. The following book is recommended:

" **Moore’s Essential Clinical Anatomy"** by Anne M.R. Agur and Arthur F Dalley, 6th edition, 2019 published by Wolters Kluwer. ISBN 9781975114435 (older editions are also fine)

**Neuroanatomy by A R Crossman and D Neary** –An illustrated colour text – 6th Edition, published by Churchill Livingstone - Elsevier

N.B. All reading references given in the practical synopses in this course manual are from "Essential Clinical Anatomy".

A small collection of books is available for students’ use in The Suttie Centre. These books must not be removed from Anatomy. Other Anatomy Resources on the Web

There is a small cluster of Internet connected computers for student use in the Anatomy Museum and another small cluster in the study area next to the Anatomy office. These are available during term time on a first come first served basis; students should note that the room may be required for classes and thus will not be available for personal study when it is being used for this.

* <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"
* Some stand-alone PCs with anatomy software are also available in the Anatomy Department - in the Resource Room. The software packages available on these computers include:
* A.D.A.M.
* McMinn's Interactive Clinical Anatomy
* Primal 3D Interactive head and neck
* Primal 3D Interactive hand
* Primal 3D Interactive shoulder
* Primal 3D Interactive knee
* Primal 3D Interactive hip
* Primal 3D Interactive foot and ankle
* Primal 3D Interactive spine
* Imaging Atlas of Human Anatomy (Radiology)

Because of licensing requirements, not all of the above packages are available on all of the machines.

All of the packages listed above have "quiz" applications that you may find useful for revision purposes.

All of the packages are available during practical classes and at other times throughout the year.

Please note that these are commercial packages that have not been specifically designed for your course. Much of the material in these packages is presented in greater depth than you are expected to know for the examination.

Acland’s DVD atlas of Human Anatomy

This is a series of 6 DVDs that have been produced in the USA (some of the images portrayed of donated cadaveric material would not be permitted under UK legislation) and illustrate the anatomy of the human body across all body regions.

Unlike the cadaveric material used in your Anatomy classes, the material has been dissected in the unembalmed state and consequently retains better colouration and flexibility than the cadaveric material in your classes.

The DVDs are organised by body region:

1. The head and neck 1

2. The head and neck 2

3. The internal organs

4. The lower extremity

5. The trunk

6. The upper extremity

The DVDs come with commentary – you will need a set of headphones (you can purchase a set from the Library, or simply use your own set from your Mp3 player etc.)

The DVDs are networked across the University of Aberdeen, including Halls of Residence.

From the classroom desktop:

- go to Life Sciences and Medicine

- then Medicine

- then Anatomy

- then Aclands DVD Atlas of Human Anatomy

- then select DVD of choice

You will then be taken to MAIN MENU (via credits – takes about 70 secs)

(to bypass credits, go to “menu” on DVD control panel, then select “title menu”)

You may, if you wish, view each DVD from beginning to end.

Alternatively, from the main menu, you can select:

Table of contents – This lists the main topics covered on the DVD – the equivalent of chapters in a textbook. Click on a title to go to the start of the chosen chapter.

Index – This provides an alphabetical listing of the individual topics covered in the DVD (and cross references to other DVDs in the series). Click on a topic to go to the start of the sequence covering the topic.

Glossary – This gives a glossary of terms, listed alphabetically.

Other tools: the DVD control panel that appears on the screen has a number of features that you may choose to make use of e.g. changing speed, zoom, etc.

# Lecture Synopsis

This course does not use traditional lectures as part of its teaching, except where specific material must be covered in greater detail (e.g. the Anatomy Act lecture at the very start of the course). Instead of full-length lectures, there will be short talks as described in the following section of this handbook.

Detailed contents for each practical session will be published on MyAberdeen, plus students will use workbooks containing specific tasks/learning activities that will help them focus their studies in anatomy.

Practical/Lab/Tutorial Work

**Lectures/Tutorial**

Lectures/Tutorial (Around 30-40 minutes) will explain areas of difficulty or interest in each region of the body. All Lectures/Tutorials will be held at MedChi hall at Polwarth building and it starts every Tuesday‘s at 10 am (10-11am). You will also find recorded panopto lectures of the course topics at My aberdeen site to support your study. Please note that views of the teaching videos will be tracked to monitor student engagement throughout the course.

**Practicals**

There will be practical classes each week. These sessions are compulsory (attendence will be monitored) and you will expected to make an active contribution and make the most of the human cadaveric specimens provided during these sessions. Therefore, you are expected to be prepared for each session, which means that you have worked through the respective section of your workbook. Please find the dates and times for these practical classes in the timetable at the end of this handbook.

**Museum and DR Opening Hours**

The Museum and Dissecting Room will be available for self-study during the following times:

Monday - Thursday (including Wednesday pm) 9am - 4.45pm Friday - 9am – 4.15pm (DR 9am –2pm Closed in PM) (N.B. - It may be necessary to close for lunch from 1-2pm if staff are unavailable to supervise the Dissecting Room area)

Please note that these rooms are used for classes - they will not be available for private study, including the use of the computers, when classes are in progress.

You are encouraged to use these facilities to supplement the learning opportunities provided during timetabled classes.

Class material will normally be changed on Monday mornings.

University Policies

Students are asked to make themselves familiar with the information on key education policies, available [here](https://www.abdn.ac.uk/staffnet/teaching/key-education-policies-for-students-11809.php). These policies are relevant to all students and will be useful to you throughout your studies.  They contain important information and address issues such as what to do if you are absent, how to raise an appeal or a complaint and how the University will calculate your degree outcome.

These University wide education policies should be read in conjunction with this programme and/or course handbook, in which School specific policies are detailed. These policies are effective immediately, for the 2022/23 academic year. Further information can be found on the [University’s Infohub webpage](https://www.abdn.ac.uk/students/) or by visiting the Infohub.

The information included in the institutional area for 2022-23 includes the following:

* Assessment
* Feedback
* Academic Integrity
* Absence
* Student Monitoring/ Class Certificates
* Late Submission of Work
* Student Discipline
* The co-curriculum
* Student Learning Service (SLS)
* Professional and Academic Development
* Graduate Attributes
* Email Use
* MyAberdeen
* Appeals and Complaints

Where to Find the Following Information:

C6/C7- University of Aberdeen Homepage > Students > Academic Life > Monitoring and Progress > Student Monitoriung (C6 & C7)

https://www.abdn.ac.uk/students/academic-life/student-monitoring.php#panel5179

Absences- To report absences you should use the absence reporting system tool on Student Hub. Once you have successfully completed and sent the absence form you will get an email that your absence request has been accepted. The link below can be used to log onto the Student Hub Website and from there you can record any absences you may have.

[Log In - Student Hub (ahttps://www.abdn.ac.uk/studenthub/loginbdn.ac.uk)](https://www.abdn.ac.uk/studenthub/login)

Submitting an Appeal- University of Aberdeen Homepage > Students > Academic Life > Appeals and Complaints

https://www.abdn.ac.uk/students/academic-life/appeals-complaints-3380.php#panel2109

Academic Language & Skills support

For students whose first language is not English, the Language Centre offers support with Academic Writing and Communication Skills.

Academic Writing

* Responding to a writing task: Focusing on the question
* Organising your writing: within & between paragraphs
* Using sources to support your writing (including writing in your own words, and

citing & referencing conventions)

* Using academic language
* Critical Thinking
* Proofreading & Editing

Academic Communication Skills

* Developing skills for effective communication in an academic context
* Promoting critical thinking and evaluation
* Giving opportunities to develop confidence in communicating in English
* Developing interactive competence: contributing and responding to seminar discussions
* Useful vocabulary and expressions for taking part in discussions

More information and how to book a place can be found here

Medical Sciences Common Grading Scale

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Grade | Grade Point | % Mark | Category | Honours Class | Description |
| A1 | 22 | 90-100 | Excellent | First | • Outstanding ability and critical thought • Evidence of extensive reading • Superior understanding •The best performance that can be expected from a student at this level |
|  |
| A2 | 21 | 85-89 |  |
|  |
| A3 | 20 | 80-84 |  |
|  |
| A4 | 19 | 75-79 |  |
|  |
| A5 | 18 | 70-74 |  |
|  |
| B1 | 17 | 67-69 | Very Good | Upper Second | • Able to argue logically and organise answers well  • Shows a thorough grasp of concepts  • Good use of examples to illustrate points and justify arguments  • Evidence of reading and wide appreciation of subject |  |
|  |
| B2 | 16 | 64-66 |  |
|  |
| B3 | 15 | 60-63 |  |
|  |
| C1 | 14 | 57-59 | Good | Lower Second | • Repetition of lecture notes without evidence of further appreciation of subject • Lacking illustrative examples and originality • Basic level of understanding |  |
|  |
| C2 | 13 | 54-56 |  |
|  |
| C3 | 12 | 50-53 |  |
|  |
| D1 | 11 | 47-49 | Pass | Third | • Limited ability to argue logically and organise answers • Failure to develop or illustrate points • The minimum level of performance required for a student to be awarded a pass |  |
|  |
| D2 | 10 | 44-46 |  |
|  |
| D3 | 9 | 40-43 |  |
|  |
| E1 | 8 | 37-39 | Fail | Fail | • Weak presentation • Tendency to irrelevance • Some attempt at an answer but seriously lacking in content and/or ability to organise thoughts |  |
|  |
| E2 | 7 | 34-36 |  |
|  |
| E3 | 6 | 30-33 |  |
|  |
| F1 | 5 | 26-29 | Clear Fail | Not used for Honours | • Contains major errors or misconceptions • Poor presentation |  |
|  |
| F2 | 4 | 21-25 |  |
|  |
| F3 | 3 | 16-20 |  |
|  |
| G1 | 2 | 11-15 | Clear Fail/Abysmal |  | • Token or no submission |  |
|  |
| G2 | 1 | 1-10 |  |
|  |
| G3 | 0 | 0 |  |
|  |

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BM2509 Course Timetable: 2023-24

|  |
| --- |
| Blue = Live face to face practical classes delivered in person in the lab |
| Grey = No scheduled classes for BM2009 on these days |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date | Time | Subject | Session Type | Staff | | Venue |
| Mon 22 Jan | Week 26 |  |  |  | |  |
| Tue 23 Jan | 10-11:00  11-13:00 | Pre-practical lecture 1  Pelvis and perineum: session 1 | Lecture/Tutorial  Practical class | PB  PB&MM | | Med Chi  Ana Lab |
| Wed 24 Jan |  |  |  |  | |  |
| Thu 25 Jan | 15:00-18:00 | Pelvis & perineum: session 2 (Male repro) | Practical class | PB&MM | | Ana Lab |
| Fri 26 Jan |  |  |  |  | |  |
| Mon 29 Jan | Week 27 |  |  |  | |  |
| Tue 30 Jan | 10:00-11:00  11:00-13:00 | Pre-practical lecture 2  Pelvis and Perineum: session 3 (Female Repro) | Lecture/Tutorial  Practical class | PB  PB,FG &MM | | Med chi  Ana Lab |
| Wed 31 Jan |  |  |  |  | |  |
| Thu 1 Feb | 15:00-18:00 | Pelvis & Perineum session 4 (Perineum) | Practical | PB&MM | | Ana Lab |
| Fri 2 Feb |  |  |  |  | |  |
| Mon 5 Feb | Week 28 |  |  |  | |  |
| Tue 6 Feb | 10:00-11:00  11:00-13:00 | Pre-Practical lecture 3  Head and Neck 1 | Lecture/Tutorial  Practical | PB  PB&MM | | Med Chi  Ana Lab |
| Wed 7 Feb |  |  |  |  | |  |
| Thu 8 Feb | 15:00-18:00 | Summative assessment 1: pelvis & perineum | Assessment | PB&MM | | Ana Lab |
| Fri 9 Feb |  |  |  |  | |  |
| Mon 12 Feb | Week 29 |  |  |  | |  |
| Tue 13 Feb | 10:00-11:00  11:00-13:00 | Pre-practical lecture 4  Head and neck 2 | Lecture/Tutorial  Practical | PB  PB&MM | | Med Chi  Ana Lab |
| Wed 14 Feb |  |  |  |  | |  |
| Thu 15 Feb | 15:00-18:00 | Head and Neck 3 | Practical | PB,FG &MM | | Ana Lab |
| Fri 16 Feb |  |  |  |  | |  |
| Mon 19 Feb | Week 30 |  |  |  | |  |
| Tue 20 Feb | 10:00-11:00  11:00-13:00 | Pre-Practical lecture 5  Head and Neck 4 | Lecture/tutorial  Practical | PB  PB&MM | | Med Chi  Ana Lab |
| Wed 21 Feb |  |  |  |  | |  |
| Thu 22 Feb | 15:00-18:00 | Summative Assessment: 2: H&N:1-4 | Assessment | PB&MM | | Ana Lab |
| Fri 23 Feb |  |  |  |  | |  |
| Mon 26 Feb | Week 31 |  |  |  | |  |
| Tue 27 Feb | 10:00-11:00  11:00-13:00 | Pre-practical lecture 6  Head and neck 5 | Lecture/Tutorial  Practical | PB  PB&MM | | Med Chi  Ana Lab |
| Wed 28 Feb |  |  |  |  | |  |
| Thu 29 Feb | 15:00-18:00 | Head and Neck 6 | Practical | PB&MM | |  |
| Fri 1 Mar |  |  |  |  | |  |
| Mon 4 Mar | Week 32 |  |  |  | |  |
| Tue 5 Mar | 10:00-11:00  11:00-13:00 | Pre-practical lecture 7  Head and Neck 7 | Lecture/tutorial  Practical | PB  PB&MM | | Med chi  Ana Lab |
| Wed 6 Mar |  |  |  |  | |  |
| Thu 7 Mar | 15:00-18:00 | Summative Assessment:3 H&N:5-7 | Practical | PB&MM | | Ana Lab |
| Fri 8 Mar |  |  |  |  | |  |
| Mon 11 Mar | Week 33 |  |  |  | |  |
| Tue 12 Mar | 10:00-11:00  11:00-13:00 | Pre-practical lecture 8  Brain 1 | Lecture/Tutorial  Practical | PB  PB&MM | | Med chi  Ana Lab |
| Wed 13 Mar |  |  |  |  | |  |
| Thu 14 Mar | 15:00-18:00 | Brain 2 | Practical | PB &MM | | Ana Lab |
| Fri 15 Mar |  |  |  |  | |  |
| Mon 18 Mar | Week 34 |  |  |  | |  |
| Tue 19 Mar | 10:00-11:00  11:00-13:00 | Pre-practical lecture 9  Brain 3 | Lecture/Tutorial  Practical | PB  PB &MM | | Med chi  Ana Lab |
| Wed 20 Mar |  |  |  |  | |  |
| Thu 21 Mar | 15:00-18:00 | Brain 4 | Practical | PB &MM | | Ana Lab |
| Fri 22 Mar |  |  |  | |  |  |
| Mon 25 Mar | Week 35 |  |  |  | |  |
| Tue 26 Mar | 10:00-11:00  11:13:00 | Pre-practical lecture 10  Brain 5 | Lecture/tutorial  Practical | PB  PB&MM | | Med Chi  Ana Lab |
| Wed 27 Mar |  |  |  |  | |  |
| Thu 28 Mar | 15:00-18:00 | Summative Assessment 4: Brain 1-5 | Assessment | PB&MM | | Ana Lab |
| Fri 29 March |  |  |  |  | |  |
|  |  |  |  |  |  |  |

|  |  |
| --- | --- |
| Staff | Staff |
| PB: Prem Ballal | FG: Flora Groening |
| MM: Miss Michaela (Misha) Matejova | PAL Teachers |

Campus Maps - Foresterhill



Polwarth Floor Plans

Diagram, schematic

Description automatically generated

Diagram

Description automatically generated

Diagram

Description automatically generated