# Unit Outline

7671 Anatomy 233
Semester 2, 2012

<table>
<thead>
<tr>
<th>Unit study package number:</th>
<th>7671</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mode of study:</strong></td>
<td>Internal</td>
</tr>
</tbody>
</table>
| **Tuition pattern summary:** | Lecture: 1 x 2 Hours  
Tutorial: 1 x 1 Hours  
Practical: 1 x 2 Hours  
This unit does not have a fieldwork component. |
| **Credit Value:**          | 25.0 |
| **Pre-requisite units:**  | 7689 (v.0) Anatomy 232 or any previous version |
| **Co-requisite units:**    | Nil |
| **Anti-requisite units:**  | Nil |
| **Result type:**           | Grade/Mark |
| **Approved incidental fees:** | Information about approved incidental fees can be obtained from our website. Visit fees.curtin.edu.au/incidental_fees.cfm for details. |
| **Unit coordinator:**      | Name: Georgina Fyfe  
Phone: +618 9266 7364  
Email: G.M.Fyfe@curtin.edu.au  
Building: 404  
Room: 211 |
| **Teaching Staff:**        | Name: John Owens  
Phone: +618 9266 3655  
Email: J.Owens@curtin.edu.au  
Building: 408  
Room: 3533  
Name: Jacynth Tunstill  
Phone: +618 9266 3230  
Email: J.Tunstill@curtin.edu.au  
Building: 404  
Room: 206  
Name: Kylie McVay  
Phone: +618 9266 1352  
Email: K.Mcvay@curtin.edu.au  
Building: 404  
Room: 107 |
| **Administrative contact:** | Name: Janette McLeod  
Phone: +618 9266 7374  
Email: J.Mcleod@curtin.edu.au |
| **Learning Management System:** | Blackboard (lms.curtin.edu.au) |
Acknowledgement of Country

We respectfully acknowledge the Indigenous Elders, custodians, their descendants and kin of this land past and present.

Syllabus

Explores the relationships between structure, function and embryological development of the somatic and visceral components of the neck, thorax, abdomen and pelvis.

Introduction

Welcome to Anatomy 233. Many people think anatomy is all about rote-learning facts – oh how wrong they are! That would be totally dull and boring but luckily anatomy is not like that at all. Look at the A233 unit outcomes – they include words like “predict” and that’s because there are fundamental principles that explain how anatomy works and once you have those sorted you can apply that to other contexts.

This unit builds upon your work in ISAP 100 and Anatomy 232, so you will be familiar with working in a systematic and regional way to construct understanding of the human body by looking at how it is put together. The approach in A233 is one of “if it has to do such-and-such a task, how will it need to be put together?” or “this is what its made from, what is its function likely to be?” We will integrate ideas on form and function and layer on concepts of control. I hope you will enjoy studying the details of how we are put together. It’s a challenging yet fascinating subject that I really enjoy. I hope you will enjoy it too.

Learning Outcomes

<table>
<thead>
<tr>
<th>On successful completion of this unit students can:</th>
<th>Graduate Attributes addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Discuss anatomical concepts using correct anatomical terminology</td>
<td>![ ]</td>
</tr>
<tr>
<td>2 Regularly reflect on learning and devise strategies for continual improvement</td>
<td>![ ]</td>
</tr>
<tr>
<td>3 Explain the arrangement of bones and joints of the axial skeleton, correlating structure and function</td>
<td>![ ]</td>
</tr>
<tr>
<td>4 Describe the arrangement of axial muscles and predict function and nerve supply based upon morphological and embryological cues</td>
<td>![ ]</td>
</tr>
<tr>
<td>5 Relate the function of axial viscera to their structure and explain their relationships to surrounding features</td>
<td>![ ]</td>
</tr>
</tbody>
</table>

Curtin's Graduate Attributes

- **Apply discipline knowledge**
- **Thinking skills** (use analytical skills to solve problems)
- **Information skills** (confidence to investigate new ideas)
- **Communication skills**
- **Technology skills**
- **Learning how to learn** (apply principles learnt to new situations) (confidence to tackle unfamiliar problems)
- **International perspective** (value the perspectives of others)
- **Cultural understanding** (value the perspectives of others)
- **Professional Skills** (work independently and as a team) (plan own work)

Find out more about Curtin’s Graduate attributes at the Office of Teaching & Learning website: [otl.curtin.edu.au](http://otl.curtin.edu.au)
Learning Activities

The unit uses a layering process to give you plenty of opportunities to work with the material presented. You **hear** about it in the lectures, **look** at diagrams and **read** the related references, then you test yourself on it in the tutorials before looking at relevant specimens in the lab. You will not be directed to specific readings so it is up to you to follow up with the lecture material using the textbook, so that you feel conversant with the topic prior to the practical session. If you work consistently each week you will not need to cram at the end of the semester. The emphasis is on **active** participation, which is harder work than passive, but also more effective for learning. The more you put into classes the more you will gain from them.

**Lectures**

The A233 lectures discuss what you need to know and understand prior to the tutorial and practical class related to that material. You can download a lecture outline from FLECS-bb prior to the lecture to help you take more effective notes but these outlines do not replace the lectures. You will gain most from the lectures if you skim-read the relevant textbook section prior to coming to the lecture. You should read the text again following the lecture and clarify your understanding of the material before going to the tutorial and prac classes. You should by now be able to take effective lecture notes but if you need help working with your lecture notes, take some the Study Plus modules available through Oasis. During the lectures, questions or comments are welcomed at any time. Lectures will be linked to the iLecture system for review.

There is no lock-out policy for classes - if you are running late, please **do** come in (but try not to disturb others when you enter the lecture room).

**Tutorials**

The tutorials are used to consolidate the lecture material or for quizzes and feedback sessions. The idea of the tutorial is to help you review lecture work and prepare for the practical classes. You will be expected to have reviewed your lecture material before you attend the tute.

**Practicals**

Practical classes provide an opportunity to use models and cadaver and skeletal material to test your theoretical understanding of what you have been given in lectures, and have worked with in tutorials. The practical notes lead you through checklists of structures to find, and ask you related functional questions. You should not sit in the practical classes copying things from the textbook. You should come to the practical class well prepared to view the specimens and make the most of the available time to consolidate your learning and ask questions. You should use the practical as a chance to test yourself and determine whether or not you **really** understand what we have done in the lectures, so make the most of the opportunity. It’s easier in the long run to put in the work on the day rather than have to do it later at home without the specimens or a tutor to help.

Each scheduled class is an opportunity to get closer to your career goal and to get better at anatomy. It is impossible to exactly replicate what you miss in a class and the 12-week semester means there isn’t a lot of catch-up time, so try to resist skipping a class just because you feel a bit fed up and can’t be bothered. You will still have to put in the time and without help of staff or other students so it’s not an easy option. If you can’t avoid missing a class please let us know and we can discuss your catch-up strategies.

Learning Resources

**Recommended Texts**

You **do not have to purchase** the following textbooks but you may like to refer to them.


## Assessment

### Assessment Schedule

<table>
<thead>
<tr>
<th>Task</th>
<th>Value %</th>
<th>Date Due</th>
<th>Unit Learning Outcome(s) Assessed</th>
</tr>
</thead>
</table>
| 1 Tutorial Quiz       | 15 percent | Week: week 4  
Day: Wednesday                              | 1,2,4                             |
| 2 Practical test 1    | 20 percent | Week: Week 8  
(following the week free from contact)  
Day: Thursday            | 1,3,4,5                            |
| 3 Practical test 2    | 25 percent | Week: Week 13 (last teaching week of semester)  
Day: Thursday          | 1,3,4,5                            |
| 4 Final Examination   | 40 percent | Week: University Examination Week 1  
or 2                                    | 1,2,3,4,5                          |
Detailed information on assessment tasks

1. **Tutorial Quiz** worth 15%
   The quiz runs in the week 4 tutorial sessions. This short-answer test is based on the lecture material from the previous lectures and is designed to give feedback to you and to me about the effectiveness of your study program and give you a chance to address areas of concern during the semester. If you are unable to attend the quiz you must provide a medical certificate or equivalent in order to be given a deferred quiz. The marking criteria will be given with the answers and you will have the chance to check and question the marking key with me when you receive your quiz papers back.

2. **Practical test 1** worth 20%
   The practical tests are run in your normal practical timeslot. They are written by me and change every semester. The prac tests test your ability to recognise structures from the specimens you have worked with in class, and to answer questions relating to those structures. You will be told more about the set-up of the tests and the distribution of material to be tested closer to the time, and there will be a mock-test in the tute session prior to the prac test to help. The prac tests are marked and returned within a week, and we go through the answers in class to give you useful feedback on which areas you performed poorly. If you wish to discuss any aspects of the tests you should do so as soon after this as possible. If you are unable to attend the practical test you must provide a medical certificate or equivalent in order to be given a deferred test. The marking criteria will be given with the answers and you will have the chance to check and question the marking key and your individual marks with me when you receive your prac test papers back.

3. **Practical test 2** worth 25%
   The practical tests are run in your normal practical timeslot. They are written by me and change every semester. The prac tests test your ability to recognise structures from the specimens you have worked with in class, and to answer questions relating to those structures. You will be told more about the set-up of the tests and the distribution of material to be tested closer to the time, and there will be a mock-test in the tute session prior to the prac test to help. The prac tests are marked and returned within a week, and we go through the answers in class to give you useful feedback on which areas you performed poorly. If you wish to discuss any aspects of the tests you should do so as soon after this as possible. If you are unable to attend the practical test you must provide a medical certificate or equivalent in order to be given a deferred test. The marking criteria will be given with the answers and you will have the chance to check and question the marking key and your individual marks with me when you receive your prac test papers back.

4. **Final written examination** worth 40% in total
   The final written examination paper is written by me, changes every year and covers the whole semester’s work. It is scheduled and run by the University Examinations Office during the examination period. The emphasis in the paper will be on integration of material, ascribing function to structure and explaining how things fit together. It will contain some short-answer questions and longer integrated answer questions. Examples of relevant past papers will be available on Blackboard in the first few weeks of class.

**Fair assessment through moderation**
Moderation describes a quality assurance process to ensure that assessments are appropriate to the learning outcomes, and that student work is evaluated consistently by assessors. Minimum standards for the moderation of assessment are described in the Assessment Manual, available from policies.curtin.edu.au/policies/teachingandlearning.cfm
Late penalties

Late Assessment Policy

This ensures that the requirements for submission of assignments and other work to be assessed are fair, transparent, equitable, and that penalties are consistently applied.

1. All assessments which students are required to submit will have a due date and time specified on the Unit Outline.
2. Accepting late submission of assignments or other work will be determined by the unit coordinator or Head of School and will be specified on the Unit Outline.
3. If late submission of assignments or other work is not accepted, students will receive a penalty of 100% after the due date and time i.e. a zero mark for the late assessment.
4. If late submission of assignments or other work is accepted, students will be penalised by ten percent per calendar day for a late assessment submission (e.g., a mark equivalent to 10% of the total allocated for the assessment will be deducted from the marked value for every day that the assessment is late). This means that an assignment worth 20 will have two marks deducted per calendar day late. Hence, if it was handed in three calendar days late and marked as 12/20, the student would receive 6/20. An assessment more than seven calendar days overdue will not be marked. Work submitted after this time (due date plus seven days) may result in a Fail - Incomplete (F-IN) grade being awarded for the unit.

Pass requirements

In order to successfully pass this unit you must achieve an overall score of above 50% for your combined semester mark. You do not have to pass each individual assessment task.

Referencing style

Students should use the APA 6th Ed referencing style when preparing assignments.

More information can be found on this style from the Library website: library.curtin.edu.au.

Plagiarism

Plagiarism occurs when work or property of another person is presented as one's own, without appropriate acknowledgement or referencing. Plagiarism is a serious offence. For more information refer to academicintegrity.curtin.edu.au.

Plagiarism Monitoring

Work submitted may be subjected to a plagiarism detection process, which may include the use of systems such as ‘Turnitin’. For further information, see academicintegrity.curtin.edu.au/students/turnitin.cfm.
Additional information

Enrolment:
It is your responsibility to ensure that your enrolment is correct - you can check your enrolment through the eStudent option on OASIS, where you can also print an Enrolment Advice.

Supplementary/Deferred Exams:
Supplementary and deferred examinations granted by School of Biomedical Sciences will be held in the week beginning 19th November. Notification to students will be made after the School Board of Examiners meeting, via the Official Communications Channel (OCC) in OASIS. It is the student’s responsibility to check their OASIS account for official Curtin correspondence on a weekly basis. If your results show that you have been awarded a supplementary or deferred exam you should immediately check your OASIS email for details.

Student Rights and Responsibilities
It is the responsibility of every student to be aware of all relevant legislation, policies and procedures relating to his or her rights and responsibilities as a student. These include:

- the Student Charter
- the University’s Guiding Ethical Principles
- the University’s policy and statements on plagiarism and academic integrity
- copyright principles and responsibilities
- the University’s policies on appropriate use of software and computer facilities

Information on all these things is available through the University’s “Student Rights and Responsibilities” website at: students.curtin.edu.au/rights.

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Disability
Students with a disability or medical condition (e.g. mental health condition, chronic illness, physical or sensory disability, learning disability) are encouraged to seek advice from Disability Services www.disability.curtin.edu.au. A Disability Advisor will work with you and liaise with staff to identify strategies to assist you to meet unit (including fieldwork education) and course requirements, where possible. It is important to note that the staff of the university may not be able to meet your needs if they are not informed of your individual circumstances.
Recent unit changes

We welcome feedback as one way to keep improving this unit. Students are encouraged to provide unit feedback through eVALUate, Curtin's online student feedback system (see evaluate.curtin.edu.au/info/). Recent changes to this unit include:

Feedback from staff and students prompted us to make some changes to second year anatomy units at the end of 2011. The old Anatomy 231 was always very full of content because three units had previously been divided unevenly into two, so A231 has now been replaced by two core units, Anatomy 233 and Anatomy and Neuroscience 234 (ANS234). ANS 234 will take some of the content from the overcrowded Anatomy 231 unit and combine it with integrated neuroscience content that will better prepare students for the more applied work in Neuroscience 332 in their third year. This addresses student feedback from Anatomy 231 about workload, and from Neuroscience 332 concerning lack of preparation form second year units. The proposed changes, including ANS234 allows students access to the unit materials they need in second year in order to work at a much more applied level in third year units. The other change we made was to require Anatomy 232 as a prerequisite for A233 and ANS 234 so that students have the same level of preparation for these second semester units and a greater chance of success, and less time is needed in A233 to go over fundamental material.

See evaluate.curtin.edu.au to find out when you can eVALUate this unit.
### Program calendar

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture Topic</th>
<th>1 hr Tute</th>
<th>2 hr Practical Thursday</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mon 4-6, 302.002.</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>9 Jul</td>
<td>Orientation – check Blackboard site</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>16 Jul</td>
<td>The bony rib cage and sternum (GMFyfe)</td>
<td>Lecture review</td>
<td>Osteology review and bony rib cage</td>
</tr>
<tr>
<td>2.</td>
<td>23 Jul</td>
<td>The vertebral column (GMFyfe)</td>
<td>Lecture review</td>
<td>Vertebral column</td>
</tr>
<tr>
<td>3.</td>
<td>30 Jul</td>
<td>Thoracic and vertebral joints &amp; ligaments (GMFyfe)</td>
<td>Lecture review</td>
<td>Joints &amp; ligaments of ribs &amp; vertebral column</td>
</tr>
<tr>
<td>4.</td>
<td>6 Aug</td>
<td>Vertebral column musculature (JOwens)</td>
<td>Quiz 1</td>
<td>Vertebral column musculature</td>
</tr>
<tr>
<td>5.</td>
<td>13 Aug</td>
<td>Thoracic and abdominal wall (JOwens)</td>
<td>Feedback on quiz 1</td>
<td>Thoracic &amp; Abdominal wall &amp; selected pelvic musculature</td>
</tr>
<tr>
<td>6.</td>
<td>20 Aug</td>
<td>Somatic control of musculoskeletal aspects of the trunk (JOwens)</td>
<td>Lecture review</td>
<td>Review of selected trunk musculature and its neural supply</td>
</tr>
<tr>
<td>7</td>
<td>27-31 Aug</td>
<td>Tuition Free Week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>3 Sep</td>
<td>Arrangement of thoracic spaces and development of thoracic viscera (JOwens)</td>
<td>Mock prac test (details TBA)</td>
<td>Prac test 1</td>
</tr>
<tr>
<td>9.</td>
<td>10 Sept</td>
<td>Arrangement of viscera of the cervical and thoracic regions (iLecture GMFyfe)</td>
<td>Feedback on prac test 1</td>
<td>Cervical and thoracic viscera</td>
</tr>
<tr>
<td>10.</td>
<td>17 Sept</td>
<td>Arrangement of abdominal spaces and abdominopelvic viscera (JTunstill)</td>
<td>Lecture review</td>
<td>Abdominopelvic contents I</td>
</tr>
<tr>
<td>11.</td>
<td>24 Sept</td>
<td>Abdominopelvic viscera (JTunstill)</td>
<td>Lecture review</td>
<td>Abdominopelvic contents II</td>
</tr>
<tr>
<td>12.</td>
<td>1 Oct</td>
<td>ANS control of trunk viscera (JOwens)</td>
<td>Lecture review</td>
<td>Review of control of muscles &amp; viscera of trunk</td>
</tr>
<tr>
<td>13.</td>
<td>8 Oct</td>
<td>“The Big Picture” Lecture review Revision questions. Exam hints (JOwens)</td>
<td>Mock prac test (details TBA)</td>
<td>Prac test 2</td>
</tr>
<tr>
<td>14.</td>
<td>15 Oct</td>
<td>Study Week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>22 Oct</td>
<td>Exams Week 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>29 Oct</td>
<td>Exams Week 2</td>
<td></td>
<td></td>
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</tbody>
</table>