



Optimising the A&P Course: Strategies for Student Engagement and Effective Assessment

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Platform: Mastering A&P

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“Students often mention that they appreciate the interactive sessions and MCQs in Mastering A&P. They even request more MCQs from other academics, citing them as examples of good teaching.”

Professor Selwa Alsam



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Course

As the director of the Biomedical Science course, I oversee around **100 students** each year, making a total of approximately 300 across the three-year programme. After the second year, students can choose to pursue NHS placements, industrial placements, a year abroad, or continue on the three-year course. Our course is accredited by **the Institute of Biomedical Science**, with the NHS pathway **approved by the Health and Care Professions Council**.

In the first year, students study eight modules, including the essential **Anatomy and Physiology module (BS161)**, which is crucial for accreditation. The second year also comprises eight modules, and the final year includes a significant project worth 45 credits, along with four additional modules to complete the required 120 credits per year. Anatomy and Physiology includes **33% coursework and a 67% final exam**.

I teach the cardiovascular, respiratory, and urinary tract systems with the support of Mastering A&P, and the feedback from students has been excellent. We are ranked 2nd in the UK for Biosciences (The Mail University Guide 2025), and 2nd for Anatomy, Physiology and Pathology for overall positivity score (National Student Survey 2024 - English broad-discipline higher education institutions).

Aims, objectives of using Mastering A&P

We aim to teach in a way that maximises student understanding, recognising that students have **varied learning preferences**. Some prefer text, others practical, and some thrive on interaction. Our primary goal is to impart knowledge effectively and assess understanding through **multiple-choice questions and case studies after each lecture**. These methods have proven popular among students.

Initially, many students found the volume of information overwhelming, especially in the first year of the Anatomy and Physiology module. In response, I reduced the content while ensuring we still met the accreditation requirements set by the Institute of Biomedical Science. Recent feedback indicates that this adjustment has been successful, and **students no longer express concerns about the content load**.



Connecting to real life

All of us have experienced illnesses or defects related to anatomy and physiology, such as heart diseases, urinary tract infections, or respiratory infections. I always provide **real-life examples** to make the material more relatable and engaging. This approach is not limited to anatomy and physiology; I use it in my medical microbiology teaching as well.

Students engage much better with practical, real-world examples than with purely theoretical discussions. I also encourage them to **share their own experiences**, which they genuinely appreciate and find enriching.



Impact on workload

As I mentioned, the quizzes contributing to 10% of the mark are automatically collected from Mastering A&P, so I don't need to do anything manually. **This automation significantly reduces my preparation time.** Additionally, Milan, our local Pearson digital solution specialist attends the first lecture each year to explain the system, the [Study Area](#) with its **interactive elements**, and their benefits to the students. Presenting content in **multiple formats** is crucial, as our students come from **diverse backgrounds**, and this variety enhances their understanding and learning experience.

Credit, integration, communication

We incorporate model quizzes and smaller **quizzes** from Mastering A&P, which contribute **10%** to their overall mark. Along with these quizzes, **33%** of their assessment comes from **coursework**, including practicals, and **67%** from **final exam**.

I emphasise the importance of meeting deadlines in Mastering A&P and consistently remind students about them. We publish deadlines in Moodle and I advise students to note them in a diary, ideally two days before the actual submission date.

To manage their workload, we coordinate with the Director of Education to avoid overwhelming them with too many deadlines in a week. This system has been effective, and **we remain responsive to student feedback, adjusting as needed to ensure a manageable workload.**



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“I particularly value the Interactive Physiology sessions in the Study Area, and the multiple-choice questions.”

Benefits for educators

Using model quizzes and smaller quizzes from Mastering A&P has **immensely reduced my preparation time** for lectures and finalising exam questions. This approach also allows me to provide **extra practice questions** for students before exams and use multiple-choice questions to assess their understanding after each lecture.

This method **fosters interaction between academics and students**, enhancing their grasp of the material. For instance, after teaching the urinary tract system, several students commented that, although they had studied it before, this was the first time they truly understood it well. This feedback indicates that using Mastering A&P and these techniques significantly enhance their comprehension, which is our primary goal.

Personal favourite feature

I particularly value the **Interactive Physiology** sessions in the [Study Area](#), and the multiple-choice questions. We also have practical sessions where students can examine organs, but providing similar experiences during lectures before the practical sessions is crucial. This preparatory step **enhances their understanding and engagement**, making the hands-on experience more meaningful.

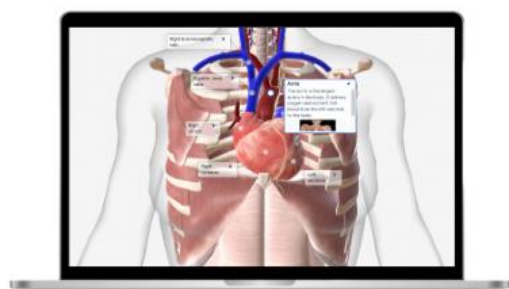


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Key features in Mastering A&P

A&P Flix

Offer 3D movie-quality animations that will help your students visualise joint movements and origins, insertions, actions, and innervations of more than 65 muscles to improve understanding.

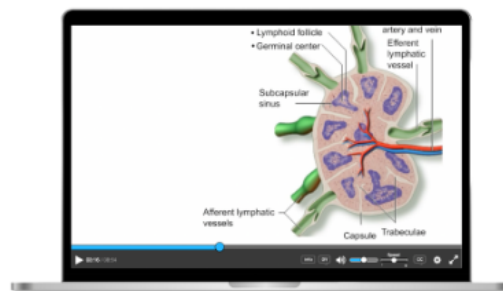


Practice Anatomy Lab 4.0

This indispensable virtual anatomy study and practice tool gives students 24/7 access to the most widely used lab specimens, including human cadaver anatomical models, from leading manufacturers. Easy to use, Practice Anatomy Lab 4.0 includes built-in audio pronunciations, rotatable bones and simulated fill-in-the-blank lab practical exams.

Interactive Physiology 2.0

Teach complex physiology processes using clear animations, interactive tutorials, games, and quizzes. IP 2.0 tutorials feature brand new graphics, quicker navigation, and more robust activities where students can explore, experiment, and predict.

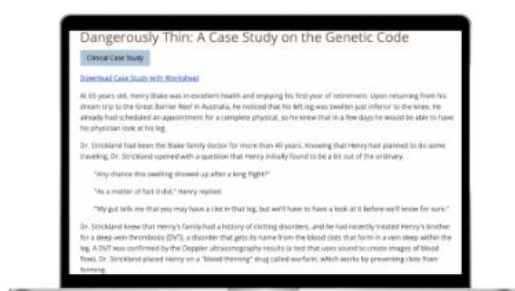
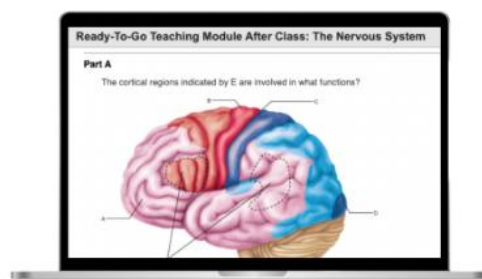


PhysioEx™ 10.0 Laboratory Simulations

PhysioEx™ 10.0 Laboratory Simulations contain more than 60 easy-to-use laboratory simulation activities, complementing wet labs and building student confidence in practical applications.

Ready-To-Go teaching modules

Reduce lesson preparation time and discover new ideas for in-class activities with Ready-To-Go Teaching modules. These are designed to provide you with activities and assignments that you can use before, during, and after class.



Clinical Case Studies

Assign real-world clinical scenarios, with follow-up questions, to help students better connect their learning with the subject area.



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Student feedback

As I mentioned, most student feedback has been **very positive**. Initially, they felt there was too much information, but I addressed this concern. We hold meetings with student representatives every three months to discuss any issues.

The Anatomy and Physiology module **consistently receives positive comments**, reflecting their satisfaction with the module.

Impact on results

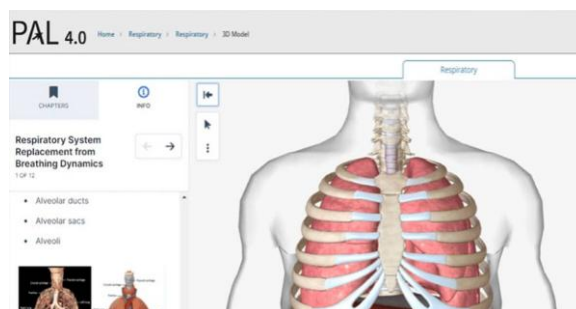
It's hard to compare cohorts directly due to the numerous changes we've implemented. During the pandemic, exams were conducted online as open-book assessments.

However, with accreditation from the Institute of Biomedical Science, we've now shifted to closed-book exams. This is the first year we're returning to the closed-book format since the pandemic, so it will take a few years to see if there's any significant difference. Given the differing formats, a direct comparison isn't possible at this stage.

Impact on student engagement

Students often mention that **they appreciate the interactive sessions and MCQs in Mastering A&P**. They even request more MCQs from other academics, citing them as examples of good teaching. At the end of each lecture, I dedicate the last 10 minutes to discussing **case studies and providing MCQs**, which they thoroughly enjoy. **This approach fosters engagement and reinforces their learning effectively.**

“Presenting content in multiple formats is crucial, as our students come from diverse backgrounds, and this variety enhances their understanding and learning experience.”

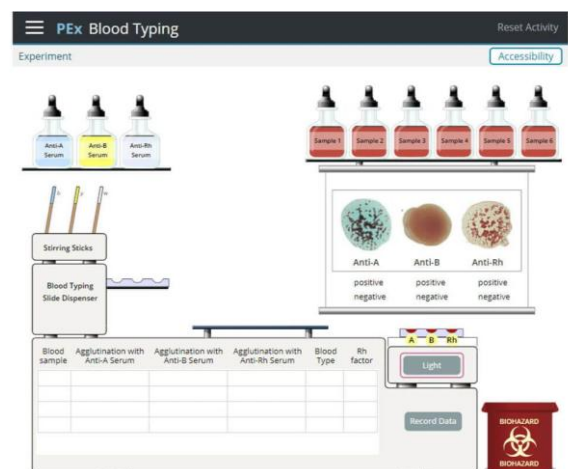
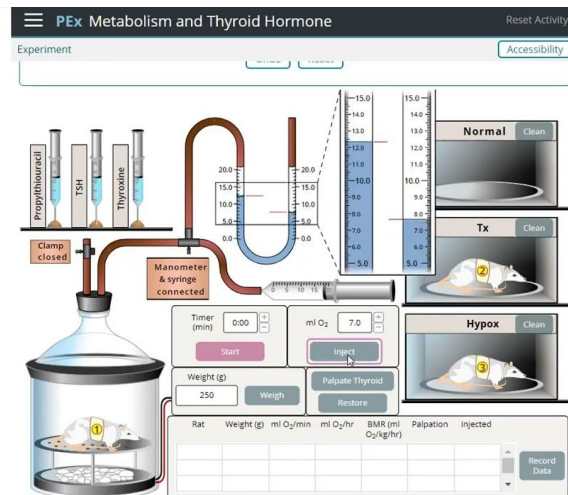




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Advice for first-time users

I would encourage all academics to use various methods to assess students' knowledge, such as providing examples and different types of questions, which Mastering A&P allows. Offering diverse teaching formats ensures that most of the cohort can grasp the content effectively. This approach helps **cater to different learning styles** and **enhances overall understanding**.



To learn more about Mastering A&P
please visit

<https://www.pearson.com/en-gb/higher-education/products-services/mastering/mastering-anatomy-and-physiology.html>