The UQ School of Human Movement and Nutrition Sciences offers senior PE classes the unique opportunity to gain hands-on experience in exercise and sport science - the sciences which support students’ own performances as well as Australia’s elite athletes.

The HMNS School Visits program is an educational experience where students can draw on Senior PE curriculum and apply it to practical situations in our state-of-the-art human performance laboratories. During the visit students are encouraged to play an active role in conducting different exercise and sport science tests and evaluating results. Students receive a workbook in which they can record and interpret data from assessments of human performance.

Five separate sessions are offered which are linked to Focus Area A and B of the Senior PE Syllabus. Learning experiences can be integrated to your chosen physical activity or tailored to the needs of your students and PE program.

Visits may last from 45 minutes to a full day and incorporate one or several of the options.

The program offers you, as a physical education teacher, an opportunity to reinforce aspects of your curriculum using HMNS first class performance laboratories and expertise of exercise science staff.

Learning Experiences

Sessions offered within the HMNS School Visits Program relate directly to the Physical Education curriculum ‘focus areas’. This means that students are gaining knowledge and skills relevant to what they are being taught in the classroom.

Focus Areas and Sessions

<table>
<thead>
<tr>
<th>Focus Area B</th>
<th>&gt; Exercise Physiology (Aerobic / Anaerobic Testing)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>&gt; Strength Testing and Training</td>
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<tr>
<td>Focus Area A</td>
<td>&gt; Sport Psychology</td>
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<td></td>
<td>&gt; Motor Learning</td>
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<tr>
<td>Other Areas</td>
<td>&gt; Anthropometry (body size and composition)</td>
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</table>
Session Descriptions

**Exercise Physiology (Focus Area B)**

This session involves testing the three energy systems to explore the body's physiological responses to exercise. Discussion will compare students’ results to normative data, and apply concepts to training programs.

A VO₂ max treadmill test is used to calculate aerobic capacity and maximal heart rate. A demonstration of marathon pace is also used to personalise this distance event.

Aerobic peak power and work capacity are explored through two bike tests (10 second and 30 second Windgate bike tests).

**Strength Testing and Training (Focus Area B)**

This session includes specific tests of muscular strength, endurance and power monitoring.

Students will examine applications to programming, training and sport performances, injury prevention and rehabilitation, and strength and power profiling.

A variety of isometric strength testing protocols using a Cybex machine are performed to demonstrate the strength and endurance of the quadriceps and hamstrings. The latest GymAware system is also used to monitor athletic strength and power profiling using free weights.

**Motor Learning (Focus Area A)**

Using Smart Speed timing light system, all students are given the opportunity to measure their simple and complex reaction times to visual stimuli.

By exploring the underlying neural principles of information processing, students will develop an understanding of the importance of practice and feedback, and its applications to skill development.

The Smart Speed system will also allow students to assess other aspects of sports performance including, speed, endurance, race-pacing and decision making.

**Sport Psychology (Focus Area A)**

Your Sport Psychology session will explore the principles of psychology to enhance physical performance. Sessions can be adapted to match your class focus.

Topics might include:
- Motivation
- Goal setting
- Team dynamics
- Arousal and performance
- Imagery and visualisation
- Relaxation and stress management

**Anthropometry (body size and composition)**

This session involves the measuring of skinfolds, girths (Waist:Hip Ratio), height and weight (BMI). Discussion will be applied to general health and athletic performance.

Cost of Sessions

<table>
<thead>
<tr>
<th>Session</th>
<th>Cost (5 to 19 students)</th>
<th>Cost (20 to 35 students)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise Physiology (1.5h)</td>
<td>$300/session</td>
<td>$15.00/student</td>
</tr>
<tr>
<td>Strength Testing (1h)</td>
<td>$200/session</td>
<td>$10.00/student</td>
</tr>
<tr>
<td>Anthropometry (1h)</td>
<td>$200/session</td>
<td>$10.00/student</td>
</tr>
<tr>
<td>Motor Control (1h)</td>
<td>$200/session</td>
<td>$10.00/student</td>
</tr>
<tr>
<td>Sport Psychology (1h)</td>
<td>$200/session</td>
<td>$10.00/student</td>
</tr>
<tr>
<td>Full-day visit (3 sessions)</td>
<td>$560 / 3 sessions</td>
<td>$28.00/student</td>
</tr>
</tbody>
</table>

Please note: Price is determined by group size and number of sessions.

**Bookings**

HMNS School Visits booking can be made by completing a School Visits booking form which can be downloaded from:

www.hmns.uq.edu.au/school-visits-program

You may alternatively contact the School to request a booking form to be sent via email.

*We can only confirm bookings when the booking form has been received. All bookings will depend on availability of the facility and staff.

**How to find out more**

HMNS School Visits
E: hmns.schoolvisits@uq.edu.au
F: (+61) 3365 6877
www.hmns.uq.edu.au/school-visits-program