

## PHRM90015 Doppler & Quantitative Echocardiography

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2011, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus. Off campus
<b>Time Commitment:</b>	Contact Hours: n/a Total Time Commitment: It is estimated that distance education students will be required to spend approximately 120 hours through a combination of studying course materials, reading nominated texts, journal review, practice worksheets, assessment assignments, and in identifying and integrating the information within their clinical practice.
<b>Prerequisites:</b>	Nil
<b>Corequisites:</b>	Nil
<b>Recommended Background Knowledge:</b>	Nil
<b>Non Allowed Subjects:</b>	Nil
<b>Core Participation Requirements:</b>	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>
<b>Contact:</b>	<b><i>Kerrie Edmond</i></b> Course Administrator PGDipEcho The University of Melbourne Department of Pharmacology Level 8, Medical Building Cnr Grattan Street & Royal Parade Parkville Victoria 3010 AUSTRALIA E: <a href="mailto:echo-info@unimelb.edu.au">mailto:echo-info@unimelb.edu.au</a> ( <a href="mailto:echo-info@unimelb.edu.au">mailto:echo-info@unimelb.edu.au</a> ) Ph: +61 3 8344 5673 Fax: + 61 3 8344 5193 Website: <a href="http://www.heartweb.com.au/training/Diploma.html">http://www.heartweb.com.au/training/Diploma.html</a> ( <a href="http://www.heartweb.com.au/training/Diploma.html">http://www.heartweb.com.au/training/Diploma.html</a> )
<b>Subject Overview:</b>	<b>This course is no longer taking new enrolments. The last intake into this program was Semester 2, 2009.</b>  This subject will explore the use of Doppler ultrasound techniques in perioperative medicine. It will include the use of pulsed wave, continuous wave, and colour flow Doppler techniques. Accuracy of Doppler measurements, and limitations with different transducer types will be explored. The subject will focus on haemodynamic assessment with Doppler, M-mode, and two-dimensional imaging. An understanding of determining the basic haemodynamic state will be developed. It is expected that the students will develop a comprehensive understanding of normal and abnormal values with these measurements.
<b>Objectives:</b>	Upon completion of this subject, students should; o understand the different Doppler modes

	<ul style="list-style-type: none"> <li>o understand the limitations of Doppler, especially as it relates to transoesophageal echocardiography and epivascular imaging.</li> <li>o Understand how to perform measurements using calibre and trace functions in order to measure distances, areas, peak and mean gradients, and velocity time integrals.</li> <li>o Perform haemodynamic calculations such as cardiac output estimation, left atrial pressure estimation, pulmonary artery pressure estimation, and shunt fraction calculation.</li> <li>o Understand the range of normal values for Doppler, M-mode, and 2-dimensional measurements.</li> </ul>
<b>Assessment:</b>	Open book multiple choice question exam 50 questions per subject (80%). Self assessment modules in the workbooks (20%). The University reserves the right to review these worksheets if there are any doubts about the authenticity of the students work, or to monitor student progress. .
<b>Prescribed Texts:</b>	All students will be provided with educational material via post.
<b>Recommended Texts:</b>	NA
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<p>This subject encompasses particular generic skills. On completion of the subject, students should be able to:</p> <ul style="list-style-type: none"> <li># Evaluate scientific literature to determine accuracy of measurements, and the range of agreement between echocardiography measurements and other measurement modalities.</li> <li># Analyse measurement data and integrate it with clinical scenarios.</li> <li># Improve articulation of interpretation of data in written form.</li> </ul>
<b>Links to further information:</b>	<a href="http://www.pharmacology.unimelb.edu.au/echocourse/">http://www.pharmacology.unimelb.edu.au/echocourse/</a>
<b>Related Course(s):</b>	Postgraduate Diploma in Perioperative and Critical Care Echocardiography