SECTION ONE

ORGANISATIONAL ASPECTS OF THE CLINICAL STUDIES’ PROGRAM
Section One

1.1 Introduction

The Department of Medical Imaging and Radiation Sciences has been providing radiographers and sonographers who are engaged in supervising students with guidelines related to clinical education since 1998. This year we have decided to provide an on-line version of the guidelines which we trust will facilitate a wider distribution of them within those departments and practices who host our students.

As we remarked back in 1998, we know that having a student at your side can be challenging and frustrating. There is always an element of risk when teaching occurs in front of a patient. For instance, something you might say to the student can easily be misinterpreted by the patient. Also, in the context of a dynamic workplace setting that values speed and efficiency, meeting the competing needs of your patients and student/s is a difficult goal to achieve. The challenge is compounded by the need for practitioners to assess the clinical skills’ development of students and provide meaningful feedback to them. We believe the best way of meeting these challenges is through increasing everyone’s knowledge of teaching and learning principles.

Research has demonstrated that when practitioners are not prepared for their roles as supervisors and assessors they rely upon the methods they experienced as students. We all have ideas about how learning occurs and the kind of teaching that is required to bring about learning (Ramsden, 1992). There is no single recipe we can follow to ensure success. Assisting students to fulfil the objectives of degree level education is challenging. Professional education is concerned with the development of thinking practitioners who are able to draw upon various forms of knowledge to inform their decision-making. In the context of their clinical rotations, students need to go beyond a focus on the technical aspect of radiography. They need to develop "clinical reasoning" skills, communication skills and problem solving strategies (Higgs & Jones, 1995). They need to know why as well as what they are doing. In the light of modern educational theories of learning, the emphasis within clinical education is now upon the facilitation of learning and the creation by practitioners of supportive and collaborative clinical learning environments.

Clinical practitioners also present powerful images of their practice to students. Whether or not you realise it, you will play a key role in shaping the approach that students ultimately adopt to their practice. We hope these guidelines will:

- facilitate the provision of quality clinical learning experiences for students;
- assist practitioners to plan for and learn from the experience of clinical teaching;
- promote a process of reflective clinical practice; and
- encourage a more unified approach to clinical supervision, teaching and assessment.

A/Professor Marilyn Baird PhD
Head of the Department of Medical Imaging and Radiation Sciences

References
1.2 General and specific objectives for Clinical Studies

We have not altered our view that immersion in the world of the clinical practitioner is essential if students are to be capable of assuming the role of a radiographer upon graduation. From the commencement of the Bachelor of Radiography and Medical Imaging in 1998, it is expected that during their clinical rotations, students will develop under the guidance of radiographers:

- appropriate expertise in the professional and practical implementation and evaluation of a wide range of radiographic examinations using various imaging modalities;

- appropriate communication skills with patients and staff;

- pattern recognition skills in radiographic anatomy and radiographic pathology;

- problem-solving skills in relation to radiographic technique and patient management;

- self-monitoring skills in relation to the performance of radiographic examinations; and

- an understanding of the broader role of radiography in medical practice.

During their clinical rotations the Department of Medical Imaging and Radiation Sciences also expects students to gain experience in:

- departmental routines and the management of information;

- caring for patients of varying ages, clinical conditions and physical capabilities;

- implementing radiation safety and protection for patients and staff; and

- implementing departmental quality control measures with respect to all forms of imaging.
1.2.1 Specific objectives: Year 1 Units

In Semester one of Year One, RAD1061 Radiographic Science and Practice 1 delivers its content via three themes being:

1. Professional and psychosocial components of radiography and health care practice;
2. Radiographic positioning and image analysis for examinations of the upper and lower limbs and chest;
3. Radiographic skills application in clinical practice.

These themes are supported by the learning that takes place in RAD1021 Radiologic Physics and RAD1031 Radiologic Biology 1.

On successful completion of RAD1061 Radiographic Science and Practice 1, within the defined themes, the student will be able to:

Theme 1: Professional and psychosocial components of radiography and health care practice

1. Describe and apply within a professional standards and ethics context, theories of the psychosocial impact on human behaviour, communication and occupational health and safety of the working environment
2. Record and obtain information from individuals employing appropriate observation and interviewing skills, such that the information generated may be integrated with basic scientific theory and knowledge to provide quality levels of patient care;
3. Recognise and adapt, in a professional manner, to the variety of social, cultural and ethical perspectives that may legitimately be encountered within clinical practice;

Theme 2: Radiographic positioning and image analysis for examinations of the upper and lower limbs and chest

4. Describe and justify the radiographic projections and body positions underpinning general radiographic examinations of the elbow, forearm, wrist, hand, fingers and thumb, knee, tibia and fibula, ankle, calcaneum, foot, toes and chest of an adult ambulant patient;
5. Describe the radiographic exposure factors and apply them to general radiographic examinations of the elbow, forearm, wrist, hand, fingers and thumb, knee, tibia and fibula, ankle, calcaneum, foot, toes and chest of an adult ambulant patient;
6. Evaluate the radiographic request form, obtain a clinical history from a patient, select appropriate radiographic protocols consisting of radiographic projections positioning techniques and exposure factors to produce high quality projection(s) that will aid the diagnostic process;
7. Evaluate the resultant radiograph/s in terms of technical quality and positioning criteria and where necessary devise appropriate problem-solving strategies for less than optimal radiographic projections;
8. Distinguish anatomical features on radiographic images and recognise common radiologic pathologies or traumatic appearances in terms of the clinical question being asked;
9. In the light of the clinical problem, assess the appropriateness of supplementary projections, and where required, position the patient for the required further images.
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Theme 3: Radiographic skills application in clinical practice

10. Under supervision safely conduct radiographic examinations of the elbow, forearm, wrist, hand, fingers and thumb, knee, tibia and fibula, ankle, calcaneum, foot, toes and chest of an adult ambulant patient;
11. Position an adult patient, accounting for his/her clinical presentation, for the radiographic projections identified in the protocol, direct and align the central ray to an appropriate bony landmark and image receptor.

Through exposure to more complex radiographic examinations of the musculo-skeletal system, respiratory and abdominal systems, in semester two, RAD1012 Radiographic Science and Practice 2 delivers its content via four themes, these being:

1. The physical science principles contributing to the radiographic image, the measurement and control of radiation exposure;
2. Professional, legal, ethical and psychosocial components of radiography and health care practice;
3. Radiographic positioning and image analysis for examinations of the respiratory system, shoulder and pelvic girdles, the vertebral column, the bony thorax and plain abdomen;
4. Radiographic skills application in clinical practice.

These themes are supported by the learning that takes place in RAD1082 Radiologic Biology 2

On successful completion of RAD1012 Radiographic Science and Practice 2, within the defined themes, the student will be able to:

**Theme 1: The physical science principles contributing to the radiographic image, the measurement and control of radiation exposure**

1. Evaluate, using a detailed knowledge of the statutory regulations governing the use of ionising radiation, and describe how regulatory agencies demand the safe use of medical imaging ionising radiation equipment;
2. Discuss the response of organ systems to ionising radiation exposure, how x-radiation is monitored and measured and how personal monitoring is used, recorded and reported to enable safe practices in radiation areas for patient, staff and the general public;
3. Calculate the energy content of an x-ray beam, integral dose, dose-area product and define dose and equivalent dose when x-rays are absorbed by living tissue, using correct units;
4. Employ the principles learnt about kV, mAs and geometry of the x-ray beam that impact upon the four image quality factors of optical density, contrast, image detail and distortion to describe the characteristics of a radiograph;
5. Review the theoretical principles underpinning the operation of automatic exposure systems and computed radiography systems, and where appropriate apply this in the clinical setting;

**Theme 2: Professional, legal, ethical and psychosocial components of radiography and health care practice**

6. Describe and apply within a professional standards and ethics context theories of the psychosocial impact on human behaviour, communication and occupational health and safety of your working environment;
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7. Record and obtain information from individuals employing appropriate observation and interviewing skills, such that the information generated may be integrated with basic scientific theory and knowledge to provide quality levels of patient care;

8. Recognise and adapt, in a professional manner, to the variety of social, cultural and ethical perspectives that may legitimately be encountered within clinical practice, to interpret a radiographic request form for the imaging examination and obtain a clinical history from a patient;

Theme 3: Radiographic positioning and image analysis for examinations of the respiratory system, shoulder and pelvic girdles, the vertebral column, the bony thorax and plain abdomen

10. Describe and justify the radiographic projections and body positions underpinning general radiographic examinations of the respiratory system, shoulder and pelvic girdles, the vertebral column, the bony thorax and plain abdomen

11. Select appropriate radiographic protocols consisting of radiographic projections positioning techniques and exposure factors to produce high quality projection(s) that will aid the diagnostic process;

12. Position an adult patient, accounting for his/her clinical presentation, for the radiographic projections identified in the protocol, direct and align the central ray to an appropriate bony landmark, image receptor and ancillary equipment such as the bucky, grids and automatic exposure devices;

13. Evaluate the resultant radiograph/s in terms of technical quality and positioning criteria and where necessary devise appropriate problem-solving strategies for less than optimal radiographic projections;

14. Distinguish anatomical features on resultant images and recognise common radiologic pathologies or traumatic appearances in terms of the clinical question being asked;

15. In the light of the clinical problem, assess the appropriateness of supplementary projections, and where required position the patient for the required further images.

Theme 4: Radiographic skills application in clinical practice

16. Under supervision, safely conduct radiographic examinations of the respiratory system, pelvis, shoulder girdle, vertebral column, the bony thorax and plain abdomen of an adult patient.
1.2.2 Specific objectives: Year 2 Units

In semester one, students study two units: RAD2051 Radiographic Science and Practice 3 within which clinical studies is embedded and RAD2061 Radiologic Biology 3 which provides students with the lectures and practicals in the hepato-biliary system, gastrointestinal and genito-urinary systems and vascular system including the heart together with pharmacological principles relevant to radiographic practice.

Objectives for RAD2051 Radiographic Science and Practice 3

On completion of this unit, the student will be able to:

1. Explain the physical principles underpinning mobile x-ray systems and apply them in clinical situations to produce and evaluate images taken in the hospital wards and operating theatres;
2. Explain the physical principles underpinning digital fluoroscopic imaging systems, image intensifiers and planar conventional tomography and apply them in clinical situations to produce and evaluate images of the gastrointestinal, urinary and hepatobiliary systems;
3. Implement and evaluate appropriate quality control measures in relation to mobile x-ray systems and digital fluoroscopic imaging systems both fixed and mobile;
4. Implement and evaluate appropriate radiation safety strategies and radiation protection measures in the context of mobile and fixed digital fluoroscopic examinations;
5. Evaluate the effectiveness of exposure protocols for all general and contrast radiographic imaging in terms of image quality and radiation protection for patients;
6. Describe and evaluate the efficacy of traditional radiographic methods to image the gastrointestinal, genito-urinary and hepato–biliary systems and skull and teeth;
7. Distinguish between normal radiographic images of the musculo-skeletal system and abnormal radiographic images following injury to these body regions involving adults and paediatrics;
8. Implement and evaluate appropriate general radiographic examinations for the musculoskeletal and respiratory systems and the abdomen on adult patients with supervision appropriate to an advanced beginner radiographer;
9. Modify and adapt basic radiographic methods, techniques and protection strategies for patients in emergency situations, paediatric patients, geriatric patients and patients requiring mobile imaging examinations of the musculoskeletal system, chest and abdomen under direct supervision;
10. Apply radiographic criteria and a problem – solving perspective to paediatric, mobile, skull and accident and emergency radiographic images.

In semester two, students study two units: RAD2012 Radiographic Science and Practice 4 within which clinical studies is embedded and RAD2092 Radiologic Biology 4 and sectional anatomy. RAD2092 completes the stand alone series of Radiologic Biology units and introduces students to the central nervous system, the brain and skull. Sectional anatomy including imaging sectional anatomy is designed to prepare students for CT, medical ultrasound and MRI studied in third year and fourth year.
Objectives for RAD2012 Radiographic Science and Practice 4

On successful completion of RAD2012 Radiographic Science and Practice 4, within the defined themes, the student will be able to:

Theme 1: Physical science principles that contribute to the digital image (in particular fluoroscopic procedures) to enable manipulation and measurement of the image and its content.

1. Review and apply the scientific principles, technological characteristics and relevant applications of digital imaging systems used in vascular and non-vascular studies;
2. Describe the general applications of information technology in medical imaging and its relationship to digital-based imaging systems;
3. Use a range of basic digital image processing routines in general or digital vascular imaging and discuss how the application of these tools enables quantitative and qualitative image analysis;
4. Apply quality assurance principles to digital imaging systems.

Theme 2: Professional contexts for the management and delivery of services using contrast, interventional techniques and addressing the needs of patient groups requiring further care.

5. Appraise the professional challenges posed by patients with special needs to provide effective and safe care to them and those patients undergoing contrast imaging examinations of the gastrointestinal, urinary, hepatobiliary and cardiovascular systems;
6. Discuss the use of radiological and other medications and their administration, the control of infection, the administration of oxygen and barium, the maintenance of surgical asepsis & recognition of vital signs;
7. Discuss the relevant protocols, positioning and methods employed in digital vascular procedures of the human body and those used in interventional therapeutic procedures and apply radiographic criteria to critique angiographic image appearances;
8. Evaluate radiographs/images of the gastrointestinal, urinary and hepatobiliary systems in terms of the condition of the patient, the clinical question, anatomy and image quality factors.

Theme 3: Knowledge management, evidence based practice and research principles.

9. Discuss how evidence based practice and its application contributes to radiographic practice and identify how a range of research methods and the critique of reported research may be applied to medical radiation sciences research;

Theme 4: Radiographic skills application in clinical practice.

10 Identify personal learning goals in respect to the development of professional expertise and demonstrate an understanding of the multidisciplinary approach to the clinical management of paediatrics, the elderly and patients in accident and emergency situations;
11 Participate in digital subtraction angiographic examinations;
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12 Implement and evaluate appropriate general radiographic examinations for the musculoskeletal and respiratory systems and the abdomen on adult patients with minimal supervision and modify and adapt basic radiographic methods, techniques and radiation protection strategies for paediatric, elderly and mobile imaging examinations;

13 Manage a fluoroscopy session (in or outside of the radiology department) in terms of the radiographer's role, so that an appreciation of the nature of the professional inter-relationship between all members of the multi-disciplinary team is revealed and the team’s duty of care obligation to the patient during diagnostic imaging procedures is evident.

1.2.3 Specific objectives: Year 3 units

This year the approach adopted in first and second year was applied to the third year units. From 2011 in each semester of Year 3 there are two academic units with clinical studies subsumed within the Medical Imaging Science and Practice units. The objectives for these two units are as follows:

Semester One: RAD3051 Medical Imaging Science and Practice 1

Upon successful completion of this unit, students will be to:

1. Explain the scientific principles underpinning computed tomography
2. Describe and represent the physical configuration of axial, helical and multislice CT systems;
3. Explain and distinguish between the various data acquisition and image reconstruction processes used in CT and their characteristics;
4. Identify common CT artefacts, explain their cause and suggest methods to correct for them;
5. Apply radiation protection and dosimetry principles to the practice of CT;
6. Describe the principles underpinning advanced digital image processing, image distribution, data transfer and storage options used in specialised applications in medical digital imaging (such as scan reconstruction, 3-dimensional reconstruction, network architectures and DICOM standard for image exchange);
7. Explain the clinical rationale for the selection of CT scanning protocols, image display and reconstruction methods for CT examinations of the head, chest, abdomen and spine;
8. Implement and evaluate positioning methods, scanning protocols, image display and reconstruction routines for CT examinations of the head, chest, abdomen and spine;
9. Identify the CT appearances of the anatomical structures comprising the head, chest, abdomen and spine and distinguish between normal and abnormal structures as shown on CT;
10. Reach the level of competent student radiographer in general radiography including contrast, trauma, paediatric and mobile imaging.
11. Apply evidence based inquiry principles developed in second year to an advanced radiographic practice clinical issue

As well as RAD3051, students also study RAD3061 Medical Imaging Science (Ultrasound) in semester one.
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Semester Two: RAD3042 Medical Imaging Science and Practice 2

This unit has three broad themes.

1. Abdominal sonography.

2. Clinical practice in abdominal ultrasound and general radiography.
   This theme covers clinical experience in abdominal ultrasound examinations and facilitates ongoing development in general radiography examinations. The clinical experience covers protocols, positioning techniques and protection strategies, patient and professional communication, image evaluation, organisational and legal requirements.

   This theme covers the scientific principles underpinning breast imaging (mammography and breast sonography), their associated instrumentation and protocols, positioning methods and radiation protection principles. Radiation dosimetry is extended to an advanced level. Ethics, regulation of health care and legal issues in the professional context is also addressed.

By the end of the unit, students will be able to:

1. Describe the patient preparation and sonographic imaging methods employed in examinations of the upper abdomen.
2. Recognise and describe normal structures, function and common pathological appearances of abdominal structures in ultrasound images.
3. Explain the function, application and potential pitfalls of ultrasound instrumentation used in abdominal ultrasound scanning, including B-mode, spectral Doppler and imaging artefacts.
4. Discuss the likely bio-effects and bio-hazards of diagnostic ultrasound.
5. Perform a basic ultrasound examination of the upper abdomen to the level of a beginner student sonographer.
6. Modify and adapt general and advanced radiographic techniques, radiation protection strategies and demonstrate professional communication skills to the level of a competent student radiographer.
7. Identify ongoing personal learning goals in respect to the continued development of professional expertise in general radiography and ultrasound.
8. Describe the instrumentation, quality assurance techniques, relevant protocols, positioning and methods employed in mammography imaging.
9. Analyse advanced techniques used in radiation dosimetry calculations, and interpret estimates and measurements used in medical imaging applications.
10. Discuss the biological effects of ionising radiation, radiosensitivity of specific organ systems and relevant advanced theories of radiation damage and repair mechanisms.
11. Evaluate the role of professional ethics in the delivery of health care.
12. Define and explain the legal issues affecting the practice of medical imaging.
1.2.4 Specific objectives: Year 4 units

In final year of the course all students are enrolled in RAD4160 Advanced medical imaging and Clinical Skills which includes MRI methods and clinical rotations to CT and MRI. For their final unit, students choose between either RAD4070 Research in Medical Imaging or RAD4080 Selected Topics in Medical Imaging. As well, all students complete a 24 week period professional clinical placement (PCP) which is called RAD4000 Radiography and Medical Imaging Work Experience. The objectives for the CT and MRI component of RAD4160 and those created for RAD4000 are reproduced below:

The Objectives for RAD4160 in relation to CT

At the completion of this element of the unit students should be able to:

1. Prepare cooperative patients for MSCT examinations of the head and neck, chest, abdomen and spine;
2. Implement and adapt, where appropriate to the level of competent student radiographer MSCT protocols for the head and neck, chest, abdomen and spine, in relation to either: patient status, procedural variations, patient or professional communication, image evaluation, organisational or legal obligations under supervision;
3. Apply basic quality assurance principles to MSCT imaging systems;
4. Demonstrate practical understanding of how to conduct MSCT Angiography (CTA) and biopsy examinations
5. Demonstrate a capacity to assist in the implementation of CTA and biopsy examinations
6. Demonstrate familiarity with and, where appropriate, use, workstation software applications such as Volume Rendering (VR), Multiplanar Reconstructions (MPR), Maximum Intensity Projections (MIP).

The Objectives for RAD4160 in relation to MRI

At the completion of this element of the unit students should be able to:

1. Conduct pre-scanning screening of patients presenting for MRI examinations;
2. Provide clear pre-examination instructions to patients presenting for MRI examinations;
3. Implement to the level of beginner stage of professional development, various protocols, positions and methods used in clinical magnetic resonance imaging under close supervision;
4. Demonstrate the ability to recognize a range of anatomical structures on MRI images;
5. Describe apply basic quality assurance principles to magnetic resonance imaging systems;
6. Identify personal learning goals in respect to the development of scanning skills in magnetic resonance imaging.
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Specific Objectives for the Professional Clinical Placement

During the PCP students complete the radiographic element of RAD4160 which obliges students to complete a series of Radiographer Opinion Forms designed to provide students with the opportunity for them to demonstrate their ability to effectively communicate with patients and supplement, were necessary, the information provided on radiographic request forms through the process called radiographer health assessments (RHA).

At the completion of the professional clinical placement students will be able to

1. Assume professional responsibility for the delivery of general radiographic examinations (including fluoroscopy) of the musculo-skeletal system, respiratory system, the gastrointestinal tract, the genito-urinary system, and hepato-biliary system under appropriate levels of supervision;
2. Modify and adapt the standard general and advanced radiographic methods, techniques (including fluoroscopy) and radiation protection approaches used to image the body systems described in objective one in relation to either: patient status, procedural variations (e.g. theatre and hospital wards), patient or professional communication, image evaluation, supplementary examination, organisational or legal obligations under supervision;
3. Provide all patients irrespective of their socio-economic, cultural, ethnic or religious background with a duty of care commensurate with the expectations of the relevant professional registration board and professional body;
4. Confidently identify the anatomical structures displayed in the images created during general radiographic examinations the body systems described in objective one;
5. Recognise the presence of pathology displayed in the images created during general radiographic examinations the body systems described in objective one;
6. Apply quality assurance principles to general medical imaging systems under supervision;
7. Identify ongoing personal learning goals in respect to the continued development of professional expertise in general radiography.
1.3 Clinical Studies Convenor

The convenor for the clinical studies program is

Ms Ruth Druva  
Ruth.Druva@monash.edu

Ms Druva is assisted by the Department Administrative Officer,

Mrs Eugenia Sequeira-Leo

Eugenia.Sequeira-Leo@monash.edu

1.4 Clinical Studies model

1.4.1 Clinical rotations and preparation for Clinical Studies

To provide students with a comprehensive preparation for their professional careers, students will be rotated through a range of clinical settings during the four years of Clinical Studies. These settings include large public teaching hospitals and their affiliated hospitals, private hospitals and private radiology clinics and regional hospitals including Tasmania and where possible other interstate hospital settings. It is expected all students will undertake at least one rotation to a Victorian regional radiology centre. Every effort will be made by the Department of Medical Imaging and Radiation Sciences to pay for the accommodation expenses incurred during such rotations.

Each year Chief Radiographers of the accredited clinical centres are contacted by Ms Ruth Druva to determine placements for the following year. Centres are then organised into year levels for student to make their selection. The final clinical roster for all years is developed by Ms Druva with the assistance of the Department Administrative Officer, Mrs Eugenia Sequeira-Leo.

Each clinical rotation is preceded by an on campus clinical briefing session conducted by the Year Level Convenor/s. Upon their return to the university, students engage in a formal debriefing session. Prior to the commencement of the rotation, students are provided with full contact details regarding the clinical centre and are instructed to contact the designated tutor/supervisor or Chief Radiography by email or phone at least one week prior to the commencement of the placement.
1.5 Management and support strategies for Clinical Studies

This publication represents one of the strategies used by the Department of Medical Imaging and Radiation Sciences to ensure that the clinical program is appropriately managed by all stakeholders. Additional strategies include the Clinical Studies’ Management Committee whose role it is to ensure that the objectives established for the unit, can be achieved. The tutors/designated clinical supervisors of all of the accredited clinical departments associated with the clinical program are considered to be members of the committee. The Chairperson of the Clinical Studies Committee is Ms Ruth Druva.

1.5.1 University and Faculty Policies

The university has an official policy regarding student placements: “Guidelines for Health and Safety During Student and Staff Placements”.


In addition to these Guidelines, the Faculty publishes its own “Clinical/Fieldwork Placement Guidelines and Procedures”.

This is a very important document and needs to be read in conjunction with the Professional Behaviour Procedure Policy

The link for these Guidelines is:


We strongly advise all practitioners to read pages 3 – 7 of the Guidelines referred to above before students comment their placement. Please note in particular the statements provided on pages 7 – 9 related to student, School, Departmental and supervisor obligations.

To assist practitioners in to meet the University expectations in respect to OHS compliance, all year level clinical workbooks contain an Induction Proforma that needs to be completed on the first day student/s are in your department/practice.

A second policy that is applicable to clinical studies relates to bullying and occupational violence. Students will be provided with a copy of this policy so they are clear as to the processes they should follow if they are bullied or harassed during their placement. Please refer to the following Monash publication

“Procedures for managing incidents of bullying and occupational violence in the workplace”
1.6 Attendance obligations for students

Please refer to POLICY 3 “Clinical/Fieldwork Placement Guidelines and Procedures”.

In addition to what is stated in the Policy please read the following:

It has always been expected that students will attend their designated clinical centre from Monday to Friday of the period devoted to Clinical Studies. It was also assumed that students would start each day at 9:00am and finish at 5:00pm, have a morning and afternoon tea break and a reasonable period for lunch. Feedback over the years from students indicates that many are treated as if they were staff members. Hence in 2009 the following policy decision was made about this matter.

One the first day of the placement, the student will negotiate one of the following options:

1. A working day from 9am to 5pm with an hour for lunch and a short break (no more than 20 minutes) in the morning and afternoon

2. A working day from 8.30am to 4.30pm with lunch and tea breaks as above

3. A working day as either 1 or 2 above but with 10 minute tea breaks and a 30 minute lunch break and a half day off once a fortnight

4. A working day from 9am to 5.30pm or 8.30am to 5pm with 10 minute tea breaks and a 30 minute lunch break and a day off once a fortnight

In view of the requirements of the Learning Contracts in the second and third years of the course, students are encouraged to participate in afternoon rosters e.g. 3:00 pm to 10:00 pm or split shifts e.g. Friday afternoon 12:00 pm to 4:00 pm and Saturday morning 9:00 am to 1:00 pm or some other variation such as Monday to Thursday and all day Saturday. These variations are only permitted providing appropriate supervision is available AND must be confirmed with Ms Ruth Druva.

First year students are not permitted to vary their attendance from the normal working day. Students MUST record in their Workbook full details of their attendance in the section provided and have it signed by the designated Clinical Teacher/Clinical Supervisor.
1.6.1 Absence and sick leave

Students are instructed they MUST inform the Clinical Centre when they are unable to attend the centre for whatever reason. Depending upon the amount of time the student has been away from the clinical department an additional period of time will need to be spent in the clinical centre during the non-teaching period between whichever semester the clinical time was not completed. The Clinical Centre MUST inform Ms Druva of prolonged absences, inconsistent attendance or other related concerns.

Please refer to POLICY 4 “Clinical/Fieldwork Placement Guidelines and Procedures”.


1.6.2 Dress code for students

The following Dress code rules for Radiography students have been circulated to all students:

Male students
Navy blue or black trousers and the Monash Shirt. Whilst the wearing of a tie is preferred the final decision is left to the individual clinical centre.

Female students
Navy blue or black trousers or skirt and the Monash Shirt.

Students must ALWAYS wear their MONASH NAME BADGE and TLD BADGE.

Please refer to POLICY 6 “Clinical/Fieldwork Placement Guidelines and Procedures”.


1.7 Patient consent and safety including radiation protection & hand washing

It is professionally unacceptable for students not to be clearly identified. Patients should be given a chance to say whether or not they wish to be examined by a student, particularly when the student is not directly supervised. Students have been instructed to ensure the patient knows who is examining them. The following phrases have been suggested for use when the patient is met: “Good morning (or afternoon), I am Mary Hughes. I am a radiography student at Monash University and I will be examining you with the help of my supervisor”.

It is imperative that students provide patients with a safe environment. This also means ensuring patients are provided with adequate radiation protection

Please refer to Confidentiality in health education and practice pages 4 – 6 in
The issue of the protection of pregnant women in diagnostic radiology has long been of concern. Students have been directed to the following paper published by the Health Protection Agency:

http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1238230848746

Students are taught the crucial importance of correctly identifying patients and checking the request form matches the patient. We have provided students with the method for positive patient identification used by The Alfred Hospital.

Students are also taught to ensure the correct side marker is placed on the imaging plate prior to exposure.

We do not condone placing a side marker on an image during post processing.

Finally, students are taught the importance of hand hygiene in protecting patients from infection. We concur with the observation made by Edwards et al (2009) in the context of a small scale study into hand hygiene undertaken by students and staff in a dental teaching hospital that “in a teaching institute the habits of trainees are formed for future clinical careers and bad habits can be difficult to rectify at later stages”. The letter from which this statement has been reproduced can be read in the Journal of Hospital Infection 71 pp188-189

We also draw your attention to the following article:


In the context of this report the researchers confirm earlier research that “MRSA bacteraemia rates are not linked to measures of environmental cleanliness, which concurs with recent research showing that hand cleanliness is far more important, with ward cleanliness accounting for as little as 10% of MRSA infections”.(p312)

We ask that your department reinforces these elements of safe radiographic practice to our students.
1.8 Professional ethics

Students are provided with regular instruction regarding professional ethics. In particular, students are made aware of the need to be familiar with the Code of Conduct promulgated by the Medical Radiation Practice Board


They are also told that radiographers who choose to be members of the professional body must also ensure their practice reflects the Professional Ethics and Guidelines for Professional Conduct promulgated by the Australian Institute of Radiography (AIR).


1.9 Incident reporting, recording and investigation policy

Please refer to POLICY 7 “Clinical/Fieldwork Placement Guidelines and Procedures”.


If you form the view that a student is not performing well and some form of intervention is required please refer to Policy 2 and Policy 5 “Clinical/Fieldwork Placement Guidelines and Procedures”.


1.10 Clinical tutor/supervisor

Each clinical centre associated with the course is expected to nominate a radiographer with two years or more post qualification experience and who has knowledge about clinical teaching and learning to act as a clinical tutor/supervisor during the time students are rostered to the centre for Clinical Studies.

There are several duties this person is expected to perform:

• orientate students to the department and clinical setting;
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- facilitate the means for students to fulfil the requirements of the Learning Contracts for the development of radiographic/sonographic skills and the tasks associated with the Professional Skills’ Units;

- ensure students are appropriately supervised when they perform radiographic examinations;

- conduct the Clinical Skills’ Assessments;

- provide students with feedback on their “Self Assessment of the Dimensions of Radiographic Practice”; and

- ensure that students are not involved in holding patients during radiation exposure.

It is not expected that the designated clinical tutor/supervisor will be able to spend their entire time with students. It is important however, that students are appropriately supervised when they examine patients. The radiographers who supervise students on a day-to-day basis will themselves assume a number of roles including that of teacher.

However, for the purposes of consistency and reliability, it is CRUCIAL that the official designated clinical tutor/supervisor carries out the assessment of the students’ clinical skills and assists students to complete their self-assessment exercises.

1.11 Supervisory requirements

Students must be appropriately supervised by a registered radiographer. It is imperative that students are closely supervised if repeat exposures are required. In the current digital environment it is too easy for students to make their own decisions regarding repeat exposures without any reference to their supervising radiographers. We do NOT condone this practice.

1.12 Faculty immunisation policy

Please refer to http://www.med.monash.edu.au/current/immunisation/

For the protection of other students, patients and themselves, radiography students are expected to comply with certain precautionary procedures. This policy is in accordance with the National Health and Medical Research Council advice that educational institutions training students in health sciences should ensure that such students are protected as far as possible by vaccination against risks of infection.

The Faculty’s own policy requires that all students accept responsibility for having a satisfactory immunisation status at the commencement of the BRadMedImg course. Immunisations include diphtheria, tetanus, polio, measles, mumps, rubella and hepatitis B.

Students are provided with detailed written information about the effect that HIV, Hepatitis B or other infections may have on the ability of healthcare workers to practice their profession.
During the early weeks of year one, students are asked to make arrangements with medical practitioners, to check their immunisation status and to receive personal advice regarding infectious diseases and their personal health.

1.13 Needlestick policy

Please refer to POLICY 7 “Clinical/Fieldwork Placement Guidelines and Procedures”.


1. Under **NO** circumstances is a student, irrespective of any on-campus training, to directly inject radiographic contrast media into the veins of a patient.

2. Given the removal of a needle after venepuncture is within the current role of a Radiographer, students can engage in this activity **provided they**:

   (i) have had instruction in universal precautions, particularly in the disposal of sharps and the handling of blood waste; and

   (ii) are under the direct supervision of a registered radiographer.

3. Should a needle stick injury occur students must:

   1 report the incident to the workplace Occupational Health and Safety Officer;
   2 complete an appropriate report form;
   3 provide a photocopy of the Occupational Health & Safety Report form to the Head of the Department of Medical Imaging and Radiation Sciences; and
   4 Complete a Monash University Incident form.

Their attention has been directed to the publication by WorkSafe Victoria: “Needlestick injuries can be prevented” (publication date June 2006) refer www.worksafe.vic.gov.au

Students have also been informed about the existence of a national needlestick hotline. The value of this hotline is discussed by O’Connor (2009) in a Letter to the Editor of the Journal of Hospital Infection Vol 71 (2) pp185-186

1.14 Quality assurance processes and Clinical Studies

The Department of Medical Imaging and Radiation Sciences has instituted a number of processes whereby students can provide the year level convenor’s with feedback about Clinical Studies and the course in general.

At the conclusion of their clinical placement each semester, students are asked to complete a questionnaire in relation to their experience of Clinical Studies.
Clinical Studies’ Guidelines for Radiographers

All Clinical Centres are also asked to provide the Department of Medical Imaging and Radiation Sciences with feedback about their experiences of teaching and supervising students. The results of all of the feedback will be taken to the Clinical Studies’ Unit Management Committee for consideration.

1.14.1 Clinical liaison and completion of a Clinical Studies’ Progress Report

During each clinical block in first year and in the first semester clinical block for years 2 and three, either the clinical studies convenor or another staff member from our Department visits each student. This visit is designed to provide an opportunity for supervising radiographers to provide feedback to Monash about the progress of individual students and for Monash staff to provided informed feedback to students. During the visit a Clinical Studies’ Progress Report for each student is completed. In second semester of years 2 and 3 the progress visit is normally conducted via telephone.

1.14.2 Dealing with unexpected situations/difficulties

Please refer to Policy 2 and Policy 5 “Clinical/Fieldwork Placement Guidelines and Procedures”.


1.15 Insurance cover for students

Briefing note

This note is to confirm the University’s position on the status of Faculty of Medicine, Nursing & Health Sciences students on placements. Students are placed at agencies under direct supervision for the purpose of learning. They are not paid employees of the agency and are not considered as workers. Their status will remain that of students. We are able to confirm that students on clinical placements are covered by either the Victorian Government or the University’s insurance policies. More specific information is detailed below. The State of Victoria through Victorian Managed Insurance Authority (VMIA) provides cover for Faculty students on placements involving public patients at any Victorian Public Hospital under the Hospital’s Public Liability/Medical Malpractice Insurance Policy.

With regard to other placements, we have recently sought clarification from the University’s insurers and can now confirm that Faculty students, whilst engaged in practical placement, community placement, enterprise experience or other work experiences programmes or training activities, subject to working under professional supervision, are included in the definition of ‘the insured’ in the University Medical Malpractice Policy. In addition Faculty students are also included in the definition of ‘the insured’ in the University’s General (Public) and Products Liability policy as follows: -
“Any student engaged in practical training both on and off campus including but not limited to practical placement, medical and legal clinical placement, community placement, enterprise experience, work experience or off campus field assignments”.

Monash University has a Personal Accident Insurance Policy which provides capital, medical and loss of income benefits for all currently enrolled Monash University students. The policy covers students actually engaged in practical or community placement activities.

This statement has been prepared in consultation with the University Solicitor and the University Manager, Risk and Insurance

John Gibson
Manager Resources, Faculty of Medicine, Nursing and Health Sciences
1 March 2005

1.16 Police checks and other legal requirements

Please refer to POLICY 2 “Clinical/Fieldwork Placement Guidelines and Procedures”.


Bachelor of Radiography and Medical Imaging students are required to have current Working with Children and Police Checks Regarding their suitability to undertake clinical and community placements. All enrolled and prospective students are advised that they will be required to obtain both checks prior to undertaking their course. As the Working with Children checks cover a five year period, most students will only need to obtain a free check at the commencement of year 1, whilst students must apply and pay for a Police check annually. Note that some community partnered programs require a police check be renewed every six months.

Police Checks

Purpose
To outline the procedure for the checking and recording of National Police Certificates (NPC). The Course Administrator (CA) for each degree that administers clinical placements is responsible for recording and monitoring police checks within the policy and guidelines provided by the Department of Health (DoH) and the Victorian Police.

Responsibility
Whilst the Faculty will notify each student of the requirement to have a current NPC, it is the students’ responsibility to ensure a current NPC is applied for before going on clinical placement. Refer to DHS guidelines for definition of ‘student’ and ‘current’. It is the faculty’s duty of care to ensure that students are aware of their responsibility and that they have a current police check as required for clinical placements. The faculty is responsible for informing hospitals and clinics accordingly.

Working with Children Checks
Responsibility
Whilst the Faculty will notify each student of the requirement to have a current WWC Check, it is the students’ responsibility to ensure a current WWC Check is obtained before going on clinical placements. (Refer to the Department of Justice guidelines regarding classification of ‘student as a volunteer’ and the duration of the check.) It is the faculty’s duty of care to ensure that students are informed of the need to have a current WWC Check as required by the Department of Justice before clinical placements can be undertaken. Students are expected to carry the ID card with them at all times whilst on clinical placements and show the WWC Check ID card to staff of the Institution on demand.