

Appendix 4 – Subject Outline

| Name of Subject/Unit | Mammography | | | | | |
|--|--|--|--|--|--|--|
| Subject/Unit Code | RADY 5003 | | | | | |
| (Use a separate template | for each subject/unit in the course) | | | | | |
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| Section 1: General Information | | | | | | |
| 1.1 Core or elective subject/ | unit Indicate if the subject/unit is a: | | | | | |
| X core subject/unit | | | | | | |
| elective subject/unit | | | | | | |
| other (please specify) | : Core course for Graduate Certificate in Breast Imaging program | | | | | |
| | | | | | | |
| 1.2 Subject/unit weighting | | | | | | |
| If applicable, indicate, the weighting of this subject/unit and the total course points (eg 10 credit points for the subject/unit and 320 credit points for the course). | | | | | | |
| 4.5 Subject/Unit | t Credit Points (eg 10 credit points) | | | | | |
| 18 Total Course | e Credit Points (eg 320 credit points) | | | | | |
| | | | | | | |
| 1.3 Student workload | | | | | | |
| Indicate below, the expected | d student workload per week for this subject/unit: | | | | | |
| 40 Number time | etabled hours/week* | | | | | |
| 12+ Number pers | sonal study hours/week** | | | | | |
| Number clin | ical placement hour/week*** | | | | | |
| | ad hours/week*** | | | | | |
| * Total time spent per week at lectures, tutorials, etc ** Total time students are expected to spend per week in studying, completing assignments, etc | | | | | | |
| *** Total time spent per week on clinical placements | | | | | | |
| **** That is, * + ** + *** = \ | | | | | | |



| 1.4 Mode of Delivery Indicate if this subject/unit is delivered (You may tick more than one box). | | | | | | | |
|--|--|--|--|--|--|--|--|
| X face to face | X online | | | | | | |
| independent learning module/untimetabled study | | | | | | | |
| Independent learning module/untimetabled study | by a combination of modes (please specify) | | | | | | |
| through a practicum | other | | | | | | |
| Other (please specify) 40 hrs/week in workshop week | | | | | | | |
| | | | | | | | |
| 1.5 Pre-requisites and / or assumed knowledge Are students required to have undertaken a prerequisite/c | o-requisite subject/unit(s) for this subject/unit? | | | | | | |
| X Yes No | | | | | | | |
| If yes , provide details of the prerequisite/co-requisite or assumed knowledge requirements below: | | | | | | | |
| Prerequisites: RADY 5024 Professional Issues for Sonographers RADY 5030 Ultrasound Physics and Instrumentation | | | | | | | |
| 1.6 Resource requirements Do students require access to specialist facilities and/or equipment for this subject/unit (eg specialist facilities, computer access, equipment, particular case / scan types, libraries)? Yes X No | | | | | | | |
| | | | | | | | |
| If yes , provide details of the requirements below. Please at showing the facilities and equipment that will be used for t | | | | | | | |
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Section 2 – Academic Details

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|----|----|---------|----------|-----------|------------|
| 2. | .1 | Student | learning | outcomes/ | objectives |

List the clinical and academic learning outcomes / objectives students would be expected to attain by successfully completing this subject/unit (link to assessment tasks (refer to 2.4 below)):

| | Discuss the rationale for breast screening, and the importance of communication, client confidentiality and consent in mammography. |
|---|--|
| | |
| | Demonstrate detailed knowledge of the anatomy and physiology of the breast and recognise identifiable mammographic pathology. |
| | |
| | Demonstrate knowledge of analogue mammography equipment and compare to newer technologies ncluding full field digital mammography and computed radiography. |
| | |
| 5 | Demonstrate knowledge of basic and specialised mammographic positioning techniques the specialised views used in the assessment of breast lesions and including those useful for imaging the difficult to position client. |
| | |
| | Demonstrate knowledge of the practical mammography quality control procedures for analogue and digital mammography and radiographer image quality. |
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| | Discuss the role of other imaging technologies including breast ultrasound and MRI in the detection of breast cancer. |
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2.2 Subject/unit content and structure

Provide details in the table below, about the subject/unit content and how it is structured, including practical components such as laboratory, studio and work-based placements. **NOTE**: Please attach course materials where available

This course is run via BreastScreen SA and requires compulsory attendance for five full days of workshops, which are held on the City East campus. The workshops cover the following content:

Day 1

Basic Mammography Techniques Breast Anatomy and Physiology Breast Screening Overview Image Assessment Mammography Equipment

Day 2

Digital Mammography
Digital Mammography Artefacts
Preventing Injury and Pain
Quality Assurance and Site QC
Radiation Physics
Specialised Mammography Techniques
Breast MRI

Day3

Breast Pathology
Communication
HRT Breast Self Awareness
Intro to Breast Ultrasound
Lesion Localisation
Principles of Biopsy
Risk-Benefit Analysis for Screening Mammography
Ultrasound Appearances
cultural awareness

Day 4

Breast Biopsy Techniques
Breast Density
Breast Prostheses
Imaging the Difficult to Position Client
Management of Breast Cancer
Role of Nurse Counsellor and Infection Control

Stereotactic Mammography alternative imaging technologies

Day 5

Dealing with Difficult Clients, Colleagues, and Emotions Radiation Therapy to the Breast



2.3 Teaching methods/strategies

Briefly describe below, the teaching methods/strategies (face to face lectures, online tutorial) used in this subject/unit:

It is the view of BreastScreen SA and the University of South Australia that mammography training should be developed around a common core syllabus and assessment, so that the standard of mammography practised in the screening and diagnostic service is consistent. This infers a commitment to improving the status of mammography as a specialty area of medical radiations, and providing a high standard of image quality for improved breast cancer diagnosis. The Frome Road Training Centre has been established as a joint venture between BreastScreen SA and the University of South Australia. The Training Centre provides a clinical presence within the school, which benefits both under and post graduate students.

Lectures will be provided by guest speakers throughout the week covering a range of topics on breast imaging including but not restricted to:

Breast Screening Overview, Breast Anatomy and Physiology, Mammography Equipment, Basic Mammography Techniques, Breast Pathology Radiation Physics, Specialised Mammography Techniques, Hormone Replacement Therapy and Breast Self-Awareness, Lesion Localisation and Introduction to Breast Ultrasound, infection control, breast density,

Workshops will be conducted in small groups. these are facilitated by the organisers. The aim of the workshops are to consolidate knowledge and apply critical thinking to the knowledge acquired from the lectures.



2.4 Student assessment:

Provide, in table format as shown below, a schedule of formal clinical and academic assessment tasks and major examinations for the subject/unit

| Assessment Type (eg Assignment – 2000 word essay (specify topic), Examination (specify length)) | When Assessed (eg Week 5) | Weighting (eg 10% of Total subject/unit marks) | Learning Outcomes Assessed (link to 2.1 above eg (a), (b)) |
|---|---------------------------------|--|---|
| Case Study - 2000 words | | 50 | all |
| Written Assignment - 2000 words | | 50 | a,b,c,d, |

2.5 Prescribed and recommended readings:

Provide below, in formal reference format, a list of the prescribed and recommended readings:

Mammography Compression: Science or Art? Elkund, 1991

The application of breast compression in mammography: a new perspective. Poulos & McLean, 2004

2.6 Required Attachments:

Please provide the following materials for each subject:

- 1. The learning materials for the student
- 2. The teaching materials
- 3. The assessment tasks (academic and clinical)
- 4. Any materials provided to workplace supervisors.