A brief Course Description			
Course Name	Research Project I		
Course Code	RUS 411		
College	Health and Rehabilitation Sciences		
Department/ Program	Radiological Sciences Department/ Ultrasound Program		
Year / Level:	4thyear, 7th level		
Credit Hours	2(2.0.0)		
Contact Hours	Lecture: 2	Lab/Tutorial: 0	Training: 0
Language	English		
Track	Program Requirement		
Pre-requisites Course:	HRS 116		
Co-Requests:	None		
Course Objectives:	The course aims to prepare the student to: discuss the purpose of research and compare and contrast different types of research including qualitative and quantitative research, experimental and non-experimental research. Describe the components of a medical research article. Explore several different literature review resources and describe their strengths and weaknesses. Show how the ethical principles used in research.		

A brief Course Description			
Course Name	Cardiovascular Physiology and Pathophysiology		
Course Code	RUS 412		
College	Health and Rehabilitation Sciences		
Department/ Program	Radiological Sciences Department/ Ultrasound Program		
Year / Level:	4thyear, 7th level		
Credit Hours	3(2.1.0)		
Contact Hours	Lecture: 2	Lab/Tutorial: 2	Training: 0
Language	English		
Track	Program Requirement		
Pre-requisites Course:	HRS 113- RAD 223		
Co-Requests:	None		
Course Objectives:	Upon successful completion, the student will be able to demonstrate the anatomical, physiological dynamical, and pathological characteristics of the cardiovascular system in detail.		

A brief Course Description			
Course Name	Cardiac Sonography and Procedures		
Course Code	RUS 413		
College	Health and Rehabilitation Sciences		
Department/ Program	Radiological Sciences Department/ Ultrasound Program		
Year / Level:	4thyear, 7th level		
Credit Hours	3(2.1.0)		
Contact Hours	Lecture: 2	Lab/Tutorial: 2	Training: 0
Language	English		
Track	Program Requirement		
Pre-requisites Course:	RUS 221- RUS 313		
Co-Requests:	None		
Course Objectives:	Upon successful completion, the student will be able to identify the anatomy of the heart and major vessels, correlate the relational and cross sectional anatomy in the heart, interpret electrocardiographic data, explain hemodynamic principles relating to arterial and venous blood movement and correlate the valves and chambers movement with the cardiac cycle.		

A brief Course Description			
Course Name	Clinical Practicum IV		
Course Code	RUS 414		
College	Health and Rehabilitation Sciences		
Department/ Program	Radiological Sciences Department/ Ultrasound Program		
Year / Level:	4thyear, 7th level		
Credit Hours	3(2.1.0)		
Contact Hours	Lecture: 2	Lab/Tutorial: 2	Training: 0
Language	English		
Track	Program Requirement		
Pre-requisites Course:	RUS 311		
Co-Requests:	None		
Course Objectives:	Students in this course gain hands-on clinical and laboratory experience in the settings of cardiac sonography. Sonographic examinations are conducted under direct and indirect supervision. Topics include: oral and written communication; basic patient care; equipment manipulation for optimum image resolution; students must demonstrate the progression of knowledge and scanning skills during this clinical rotation.		

A brief Course Description			
Course Name	Breast Imaging		
Course Code	RUS 415		
College	Health and Rehabilitation Sciences		
Department/ Program	Radiological Sciences Department/ Ultrasound Program		
Year / Level:	4thyear, 7th level		
Credit Hours	3(2.1.0)		
Contact Hours	Lecture: 2	Lab/Tutorial: 2	Training: 0
Language	English		
Track	Program Requirement		
Pre-requisites Course:	HRS 113		
Co-Requests:	None		
Course Objectives:	Upon successful completion, the student will be able to gain the basic knowledge on the different diagnostic radiological procedures (mammography,MRI, nuclear medicine and ultrasound) regarding the breast; anatomy, pathology, scanning protocols, radiological appearances and evaluations.		

A brief Course Description			
Course Name	Image Interpretation		
Course Code	RUS 416		
College	Health and Rehabilitation Sciences		
Department/ Program	Radiological Sciences Department/ Ultrasound Program		
Year / Level:	4thyear, 7th level		
Credit Hours	2 (1.1.0)		
Contact Hours	Lecture: 1	Lab/Tutorial: 2	Training: 0
Language	English		
Track	Program Requirement		
Pre-requisites Course:	RUS 315		
Co-Requests:	None		
Course Objectives:	Upon successful completion, the student will be able to identify the most common and relevant anatomy, diseases of the organs, sonographic features of the organs and image interpretation.		