

Program: Pre-Nursing		Course to Program Map						
Program Outcomes: Upon completion of the program, graduates will be able to...	Essential Skills	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills	describe general biological concepts including nutrition, anatomy, physiology and genetics.
Courses								
BIOL 211: Anatomy & Physiology I	1234			IRMA		IR	IR	IRMA
BIOL 212: Anatomy & Physiology II	1234			IRMA		IR	IR	IRMA
BIOL 213: Microbiology	13				IR	IRMA		
CHEM 105: General Chemistry	1235				IRMA	IRMA	IRMA	IR
HELR 1023/102L: Certified Nurse Aide	12345	IRMA					IRMA	IRMA
HPER 109: First Aid	12345					IR		IR
HPER 115: Basic Nutrition	12345							IRMA
SOCI 105: Intro to Cultural Anthropology	12345	IRMA	IRMA					
SOCI 113: Sociology of Families	12345	IR	IRMA					

Sp19

Mapping	
I	Introduced
R	Reinforced
M	Mastered
A	Assessed/Artifact

Essential Skills	
1	written communication
2	oral communication
3	critical thinking
4	cultural diversity
5	social responsibility

BIOL 211: Anatomy & Physiology I *Curriculum Map*

Program Outcomes	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills	describe general biological concepts including nutrition, anatomy, physiology and genetics.
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Course SLO: Students will be able to							
demonstrate measurable understanding of descriptive anatomical and directional terminology including the following topics - anatomical position, - body planes, sections, body cavities & regions, directional terms, basic terminology, levels of organization, survey of body systems			IRMA		IR	IR	IRMA
demonstrate measurable understanding of the basic concept of homeostasis and how homeostatic mechanisms apply to body systems including the following topics - general types of homeostatic mechanisms, examples of homeostatic mechanisms, application of homeostatic mechanisms, predictions related to homeostatic imbalance, including disease states & disorders			IRMA		IR	IR	IRMA
demonstrate measurable understanding of basic chemistry and cellular structures and function, including the following topics - - atoms & molecules, chemical bonding, inorganic compounds/solutions (including the concept of pH), organic compounds, energy transfer using ATP, intracellular organization of nucleus and cytoplasm, membrane structure & function, mechanisms for movement of materials across cellular membranes, organelles, protein synthesis, cellular respiration (introduction), somatic cell division (mitosis & cytokinesis), reproductive cell division, application of homeostatic mechanisms, predictions related to homeostatic imbalance, including disease states and disorders			IRMA		IR	IR	IRMA

Mapping	
I	Introduced
R	Reinforced
M	Mastered

demonstrate measurable understanding of the basic tissues of the body, their location and functions, including the following topics - overview of histology & tissue types, microscopic anatomy, location, & functional roles of epithelial, connective, muscular and nervous tissues, membranes (mucous, serous, cutaneous & synovial), glands (exocrine & endocrine), and tissue injury & repair			IRMA		IR	IR	IRMA
demonstrate measurable understanding of major gross and microscopic anatomical components of the integumentary system and describe the functions of the system, including the following topics - general functions of the skin & the subcutaneous layer, gross & microscopic anatomy of the skin, roles of the specific tissue layers of the skin & subcutaneous layer, anatomy & functional roles of accessory structures, application of homeostatic mechanisms, and predictions related to homeostatic imbalance, including disease states & disorders			IRMA		IR	IR	IRMA
demonstrate measurable understanding of major gross and microscopic anatomical components of the skeletal system and explain their functional roles in osteogenesis, repair, and body movement, including the following topics, general functions of bone & the skeletal system, structural components – microscopic anatomy, structural components, gross anatomy, physiology of embryonic bone formation (ossification, osteogenesis), physiology of bone growth, repair & remodeling' organization of the skeletal system - gross anatomy of bones, classification, structure & function of joints (articulations), application of homeostatic mechanisms, predictions related to homeostatic imbalance, and including disease states & disorders			IRMA		IR	IR	IRMA

A	Assessed/Artifact
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<p>demonstrate measurable understanding of major gross and microscopic anatomical components of the muscular system and explain their functional roles in body movement, maintenance of posture, and heat production, including the following topics - general functions of muscle tissue, identification, general location, & comparative characteristics of skeletal, smooth, & cardiac muscle tissue, detailed gross & microscopic anatomy of skeletal muscle, physiology of skeletal muscle contraction, skeletal muscle metabolism, principles & types of whole muscle contraction, nomenclature of skeletal muscles, location & function of skeletal muscles, group actions of skeletal muscles, lever systems, application of homeostatic mechanisms, and predictions related to homeostatic imbalance, including disease states & disorders</p>			IRMA		IR	IR	IRMA
<p>demonstrate measurable understanding of the major gross and microscopic anatomical components of the nervous system and explain their functional roles in communication, control, and integration, including the following topics - general functions of the nervous system, organization of the nervous system from both anatomical & functional perspectives, gross & microscopic anatomy of the nerve tissue, neurophysiology, including mechanism of resting membrane potential, production of action potentials, & impulse transmission, neurotransmitters & their roles in synaptic transmission, sensory receptors & their roles, division, origin, & function of component parts of the brain, protective roles of the cranial bones, meninges, & cerebrospinal fluid, structure & function of cranial nerves, anatomy of the spinal cord & spinal nerves, reflexes & their roles in nervous system function, physiology of sensory & motor pathways in the brain & spinal cord, functions of the autonomic nervous system, comparison of somatic & autonomic nervous systems, application of homeostatic mechanisms, and predictions</p>			IRMA		IR	IR	IRMA

BIOL 212: Anatomy & Physiology II	Curriculum Map					
Program Outcomes	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills describe general biological concepts including nutrition, anatomy, physiology and genetics.
Course SLO: Students will be able to						
<p>demonstrate measurable understanding of the major gross and microscopic anatomical components of the eye and ear and explain their functional roles in vision, hearing and equilibrium - Students should also be able to identify and locate the receptors responsible for olfaction and gustation and briefly describe the physiology of smell and taste, including the following topics- gross & microscopic anatomy of the eye & ear, roles of specific tissues of the eye in vision, roles of specific tissues of the ear in hearing & equilibrium, olfactory receptors & their role in smell, gustatory receptors & their role in taste, general gross & microscopic anatomy of hearing & accessory structures of the ear, roles of specific tissues of the ear in hearing, roles of the accessory structures, role of the ear in equilibrium, application of homeostatic mechanisms, and predictions related to homeostatic imbalance, including disease states & disorders</p>			IRMA		IR	IR IRMA
<p>demonstrate measurable understanding of the major gross and microscopic anatomical components of the endocrine system and explain the functional roles of their respective hormones in communication, control, and integration, including the following topics - general functions of the endocrine system, chemical classification of hormones & mechanism of hormone actions at receptors, control of hormone secretion, control by the hypothalamus& pituitary gland, identity, source, secretory control, & functional roles of the major hormones produced by the body, local hormones (paracrines & autocrines) & growth factors, hormonal response to stress, application of homeostatic mechanisms, predictions related to homeostatic imbalance, including disease states & disorders, Note: Since the endocrine system plays a key role in the regulation and integration of body organ systems, detailed aspects of endocrine system function may be emphasized throughout the course.</p>			IRMA		IR	IR IRMA

Mapping	
I	Introduced
R	Reinforced

<p>demonstrate measurable understanding of the major gross and microscopic anatomical components of the cardiovascular system and explain their functional roles in transport and hemodynamics, including the following topics. Topics include - general functions of the cardiovascular system, general functions of the cardiovascular system, composition of blood plasma - identity, microscopic anatomy, numbers, formation, & functional roles of the formed elements of the blood, hemostasis, including coagulation of the blood, ABO & Rh blood grouping, gross & microscopic anatomy of the heart, including the conduction system, physiology of cardiac muscle contraction - blood flow through the heart, conduction system of the heart & the electrocardiogram, cardiac cycle, regulation of cardiac output, stroke volume & heart rate, anatomy & functional roles of the different types of blood vessels, pattern of blood circulation throughout the body, including systemic, pulmonary, coronary, hepatic portal, & fetal circulations, blood pressure & its functional interrelationships with cardiac output, peripheral resistance, & hemodynamics, application of homeostatic mechanisms, predictions related to homeostatic imbalance, including disease states & disorders</p>		IRMA		IR	IR	IRMA	<p>M Mastered</p> <p>A Assessed/Artifact</p>
<p>demonstrate measurable understanding of the major gross and microscopic anatomical components of the lymphatic system and explain their functional roles in fluid dynamics and immunity, including the following topics - general functions of the lymphatic system, general functions of the lymphatic system, lymph & lymphatic vessels, lymphatic cells, tissues, & organs, introduction to innate (nonspecific) defenses & adaptive (specific) defenses, innate (nonspecific) defenses, overview of adaptive (specific) defenses, antigens & antigen processing, lymphocytes & their role in adaptive immunity, antibodies & their role in adaptive immunity, applied immunology, application of homeostatic mechanisms, and predictions related to homeostatic imbalance, including disease states & disorders</p>		IRMA		IR	IR	IRMA	
<p>demonstrate measurable understanding of the major gross and microscopic anatomical components of the respiratory system and explain their functional roles in breathing/ventilation and in the processes of external and internal respiration, including the following topics - general functions of the respiratory system, gross & microscopic anatomy of the respiratory tract & related organs, mechanisms of pulmonary ventilation - pulmonary air volumes & capacities, mechanisms of gas exchange in lungs & tissues, mechanisms of gas transport in the blood, control of pulmonary ventilation, application of homeostatic mechanisms, and predictions related to homeostatic imbalance, including disease states & disorders</p>		IRMA		IR	IR	IRMA	

demonstrate measurable understanding of the major gross and microscopic anatomical components of the digestive system and explain their functional roles in digestion, absorption, excretion and elimination, including the following topics - general functions of the digestive system, gross & microscopic anatomy of the alimentary canal, gross & microscopic anatomy of the accessory glands & organs, peritoneum & mesenteries, motility in the alimentary canal, mechanical & chemical processes of digestion, processes of absorption, hormonal & neural regulation of digestive processes, application of homeostatic mechanisms, and predictions related to homeostatic imbalance, including disease states & disorders			IRMA		IR	IR	IRMA
demonstrate measurable understanding of the functional relationship among cellular, tissue and organ level metabolism, the role nutrition plays in metabolism, and the mechanisms by which metabolic rate is regulated in the body, including the following topics – nutrition, introduction to metabolism, cellular respiration & the catabolism & anabolism of carbohydrates, lipids, & proteins, metabolic roles of body organs, energy balance & thermoregulation, application of homeostatic mechanisms, and predictions related to homeostatic imbalance, including disease states & disorders			IRMA		IR	IR	IRMA
demonstrate measurable understanding of the major gross and microscopic anatomical components of the urinary system and explain their functional roles, including the following topics, general functions of the urinary system, gross & microscopic anatomy of the urinary tract, including detailed histology of the nephron, functional processes of urine formation, including filtration, reabsorption, secretion, & excretion, factors regulating & altering urine volume & composition, including the renin- angiotensin system and the roles of aldosterone& antidiuretic hormone, endocrine activities of the kidneys, such as vitamin D activation & secretion of erythropoietin, and innervation & control of the urinary bladder			IRMA		IR	IR	IRMA
demonstrate measurable understanding of the physiology of the homeostatic mechanisms that control fluid/electrolyte and acid/base balance, including the following topics- regulation of water intake & output, description of the major fluid compartments, including intracellular, extracellular, intravascular, & interstitial, volume & chemical composition of major compartment fluids, movements between the major fluid compartments, causal forces, volumes, & electrolyte balance, buffer systems & their roles in acid/base balance, role of the respiratory system in acid/base balance, and role of the urinary system in acid/base balance			IRMA		IR	IR	IRMA

<p>demonstrate measurable understanding of the major gross and microscopic anatomical components of the reproductive system and explain their functional roles in reproduction and inheritance, including the following topics - general functions of the male & female reproductive systems, gross & microscopic anatomy of the male & female reproductive systems, gametogenesis, specific roles of the female reproductive organs, specific roles of the female reproductive organs, regulation of reproductive functions, conception, pregnancy, & embryological & fetal development, parturition & labor, and mammary gland anatomy & physiology</p>			<p>IRMA</p>		<p>IR</p>	<p>IR</p>	<p>IRMA</p>
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BIOL 213: Microbiology *Curriculum Map*

Program Outcomes	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills	describe general biological concepts including nutrition, anatomy, physiology and genetics.
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Course SLO: Students will be able to							
demonstrate measurable understanding of microbial cell biology							
demonstrate measurable understanding of microbial genetics				IR			IR
demonstrate measurable understanding of the interactions and impact of microorganisms in the environment							
demonstrate measurable understanding of the interactions and impact of microorganisms and humans							
demonstrate measurable understanding of integrating themes such as microbial evolution and microbial diversity.				IR			IR
demonstrate in a supervised laboratory the ability to use a microscope, prepare a slide, use aseptic techniques, etc.							

Mapping	
I	Introduced
R	Reinforced
M	Mastered
A	Assessed/Artifact

CHEM 105: General Chemistry	Curriculum Map						
Program Outcomes	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills	describe general biological concepts including nutrition, anatomy, physiology and genetics.
Course SLO: Students will be able to							
develop knowledge about periodic properties of elements							
master inorganic nomenclature and the metric system							
develop problem-solving skills							
develop skills in group interaction and collaborative learning.							
understand basic principles of stoichiometry, physical/chemical changes, gases, acids/bases, energetics, and solutions.				IR			
develop laboratory skills including safety skills, measurements skills, and methods of inquiry in the laboratory settings.				IRMA			
develop understanding of atomic and molecular structure and bonding.							
appreciate the role of chemistry in society and industry and understand the relationship chemistry has with other sciences and the use of chemistry in technology.							
gain experience in both written and oral scientific reports.						IRMA	

Mapping	
I	Introduced
R	Reinforced
M	Mastered
A	Assessed/Artifact

HELR 1023/1021: Certified Nurse Aide *Curriculum Map*

Program Outcomes	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills	describe general biological concepts including nutrition, anatomy, physiology and genetics.
Course SLO: Students will be able to							
exhibit professional behavior							
utilize communication skills	IRMA					IRMA	IRMA
utilize the aide role & responsibilities to deliver client care as directed by care plan	IR						
demonstrate the standards of aide care related to safety & First Aid							
demonstrate the standards of aide care related to infection prevention & control							
demonstrate the standards of aide care related to the needs of client mobility, restoring & maintaining mobility of client							
utilize the standards of aide care related to comfort & rest of clients							
utilize the standards of aide care related to elimination needs of clients							IR
demonstrate the standards of aide care related to personal care & grooming of clients							
demonstrate observing, reporting & documenting for client needs	IR						
demonstrate the standards of aide care related to nutrition & fluids of clients							IR
demonstrate the standards of aide care related to restoring nutrition & elimination of clients							IRMA
identify the physical changes accompanying aging and sexuality in aging							IR
utilize aide care of standards to understand the clients personal living space							
identify ethical and legal concepts in aide care							
utilize aide care related to the biological, cultural, spiritual and psychosocial needs of clients with End of Life Care							IR
demonstrate measuring & recording vital signs for client assessment						IR	

Mapping	
I	Introduced
R	Reinforced
M	Mastered
A	Assessed/Artifact

HPER 109: First Aid	Curriculum Map						
Program Outcomes	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills	describe general biological concepts including nutrition, anatomy, physiology and genetics.
Course SLO: Students will be able to							
recognize an emergency, assess the scene and develop an appropriate plan of action.							
demonstrate the knowledge and skills necessary to provide emergency assistance in cases such as choking, rescue breathing, CPR and use of AED for adults, children, and infants.					IR		IR
demonstrate and explain how to provide care for life-threatening emergencies including breathing, shock, head and spinal injuries, sudden illness, stroke, soft tissues and musculoskeletal injuries.							IR
identify and describe how to respond effectively to a variety of environmental, man-made and/or national security emergencies.					IR		

Mapping	
I	Introduced
R	Reinforced
M	Mastered
A	Assessed/Artifact

HPER 115: Basic Nutrition	<i>Curriculum Map</i>						
Program Outcomes	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills	describe general biological concepts including nutrition, anatomy, physiology and genetics.
Course SLO: Students will be able to							
identify the six classes of nutrients and their sources.							IR
demonstrate an understanding of the processes of digestion, absorption, and metabolism of nutrients.							IRMA
employ available resources to make sound nutritional choices.							IR
explain energy balance and weight control as it relates to nutrition and wellness.							IR
describe nutritional needs throughout the lifespan.							IR
recognize global food safety, security, and sustainability issues.							

Mapping	
I	Introduced
R	Reinforced
M	Mastered
A	Assessed/Artifact

SOCI 105: Intro to Cultural Anthropology	Curriculum Map						
Program Outcomes	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills	describe general biological concepts including nutrition, anatomy, physiology and genetics.
Course SLO: Students will be able to							
define and apply key anthropological concepts, including: culture, ethnocentrism, cultural relativism, and holism.		IR					
describe key anthropological methods, such as: ethnographic fieldwork, interview techniques, and participant observation.	IRMA	IR					
define the concept of culture and discuss specific examples of how it is learned, shared and transmitted through symbolic systems including language.	IR						
demonstrate knowledge of several cultural traditions through exposure to ethnographic analysis.		IR					
identify and explain different anthropological perspectives on cultural change and continuity.							
identify ways in which different aspects of culture, including environment, economy, kinship, the arts, politics, religions and other belief systems, are interrelated and integrated in a cultural system.		IRMA					
describe and give examples of the effects of colonialism and globalization on world cultures.							

Mapping	
I	Introduced
R	Reinforced
M	Mastered
A	Assessed/Artifact

SOCI 113: Sociology of Families *Curriculum Map*

Program Outcomes	gain strong interpersonal and communication skills.	describe fundamental concepts in psychology and sociology.	relate the functions and relationships in the human body.	use mathematical concepts to solve problems.	understand and apply foundational knowledge to increase critical thinking skills.	demonstrate written and oral communication skills	describe general biological concepts including nutrition, anatomy, physiology and genetics.
Course SLO: Students will be able to							
summarize historical, social, and cultural forces that shape contemporary families		IR					
examine the social processes in familial and intimate relationships	IR	IR					
analyze diverse intimate relationships and family structures	IR						
critically analyze family issues utilizing evidence-based research and theoretical perspectives	IR	IRMA					

Mapping	
I	Introduced
R	Reinforced
M	Mastered
A	Assessed/Artifact