

## Beal University Canada – BScN Program – COURSE LIST AND DESCRIPTIONS

Course Code	Course Title	Contact Hours	Credit Hours
<b>Concentration Requirements</b>			
IDS325	Pathophysiology	60	4
IDS375	Bioinformatics	60	4
IDS450	Holistic Approaches to Healthcare	60	4
NU100	Introduction to Foundational Nursing Concepts	75	4
NU110	Nutrition	30	2
NU125	Foundational Nursing Concepts II	120	5
NU140	Pharmacology and the Nursing Process	45	3
NU180	Nursing Concepts Across the Life Span 1	165	6
NU210	Nursing Concepts Across the Life Span II	151	5
NU230	Nursing Concepts Across the Life Span III	166	6
NU260	Nursing Concepts Across the Life Span IV	166	6
NU350	Evidence-Based Practice in Healthcare	60	4
NU410	Community and Population Health Nursing	120	5
NU425	Transcultural Perspectives in Healthcare	60	4
NU460	Leadership: Trends in the Changing Healthcare Environment	60	4
NU480	BN Transitions to Nursing Practice	166	6
<b>Subtotal</b>		1564	72

<b>General Education Requirements</b>			
BIO210	Biology	75	4
EH102	Speech	45	3
EH111	College Composition	45	3
ENV101	Environmental Geology	45	3
GEN305	Advanced Written Communications	45	3
GEN330	Introduction to Philosophy	45	3
MS110	College Algebra	45	3
MS315	Statistics	60	4
PY202	Lifespan Development	45	3
SC101	Introduction to Sociology	45	3
ZO115	Human Anatomy and Physiology of the Structural Systems	75	4
ZO116	Human Anatomy and Physiology of the Organ Systems	75	4

ZO211	Microbiology with Lab	75	4
ZU310	Genetics	60	4
<b>Subtotal</b>		<b>780</b>	<b>48</b>
<b>Grand Total</b>		<b>2344</b>	<b>120</b>

## Course Descriptions

### **BIO210 Biology**

**4 Semester Credit Hours**

Prerequisites: None

Topics covered in the course include: chemistry of life, cell structure and membranes, cellular functions (metabolism, respiration, photosynthesis, communication, and reproduction), genetics (inheritance patterns, DNA structure and function, gene expression, and biotechnology), and evolution. This course involves both lecture and lab components.

### **BIO320 Environmental Biology**

**3 Semester Credit Hours**

Prerequisites: None

Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research.

### **EH102 Speech**

**3 Semester Credit Hours**

Prerequisite: None

This basic speech course is designed to present the principles and basic skills for effective speaking and to provide an appreciation of the values and uses of spoken communication. Students will learn to present informative and demonstration speeches, and speeches for special occasions.

### **EH111 College Composition**

**3 Semester Credit Hours**

Prerequisite: None

This course introduces the essentials of prose writing, generation of ideas, organization and the writing process. Grammatical accuracy, sentence structure and use of supporting details are stressed. Students practice these concepts first by reading and analyzing prose models and then by writing paragraphs and translating to longer essay themes of various lengths using the following strategies: narration, description, definition, process, divide and classify, cause and effect, compare and contrast, and argument. A research paper demonstrating proper referencing and documentation is also included.

### **ENV101 Environmental Geology**

**3 Semester Credit Hours**

Prerequisites: None

A study of the impact of geological processes on society and the environmental consequences of the use of Earth resources by humans. Includes analyses of geologic hazards (including earthquakes, volcanic eruptions, groundwater contamination, flooding) and the attempts made to evaluate and mitigate their risks to human populations. Special attention will be focused on environmental impacts of land-use and economic resource development.

**GEN305 Advanced Written Communications****3 Semester Credit Hours**

Prerequisites: None

This course will introduce students to more in-depth academic writing genres incorporating narration, visual analysis, reviews and argument in a variety of academic publications. Students will continue to refine best practices regarding writing and research techniques, learn to conduct research relevant to individual student disciplines, and become well-versed in the effective use of online databases, journals, and libraries. Student will effectively incorporate, and document primary and secondary sources formatted correctly with the APA style, while demonstrating higher levels of composition incorporating the writing process and all elements of successful writing across multiple academic disciplines.

**GEN310 Advanced Oral Communications****3 Semester Credit Hours**

Prerequisites: None

This course explores theories that attempt to explain person to person interactions. Individual and dyadic variables affecting the development, maintenance, and dissolution of different types of relationships will be addressed. Topic areas, such as attributions, social exchange and equity, attraction, intimacy/affiliation and power/dominance, will be discussed in terms of current research findings.

**GEN315 Principles of Economics****3 Semester Credit Hours**

Prerequisites: None

This course provides an introduction to a broad range of economic concepts, theories and analytical techniques. It considers both microeconomics - the analysis of choices made by individual decision-making units (households and firms) - and macroeconomics - the analysis of the economy as a whole. The use of a market, supply and demand, model will be the fundamental model in which trade-offs and choices will be considered through comparison of costs and benefits of actions. Production and market structure will be analyzed at the firm level. Macroeconomic issues regarding the interaction of goods and services markets, labor and money at an aggregate level will be modelled. The role of government policy to address microeconomic market failures and macroeconomic objectives will be examined.

**GEN325 Sociology of Work****3 Semester Credit Hours**

Prerequisites: None

Consideration of world of work across time and cultures with special emphasis on American society. Impact of work on individuals and other social institutions.

**GEN330 Introduction to Philosophy****3 Semester credit hours**

Prerequisites: None

This course discussed the modern philosophy, from the Renaissance to the present, with careful study of works by Descartes, Hume, Kant, and others. Emphasis is placed upon the complex relations of philosophy to the development of modern science, the social and political history of the West, and man's continuing attempt to achieve a satisfactory worldview.

**IDS325 Pathophysiology****4 Semester Credit Hours**

Prerequisites: None

This course focuses on core concepts necessary to understand the physiological aspects of disease and the approach necessary for the professional provider. Explores the pathophysiology of common disease states and integrates quality and safety approaches to the evaluation and treatment of the client. The student will address scientific principles essential to understanding alterations in body systems and will develop professional clinical decision making for health promotion, risk reduction, and disease management across the lifespan. The course

provides a comprehensive approach to common alterations in body systems and addresses etiology, and clinical presentation of the disease process.

**IDS375 Bioinformatics**

**4 Semester Credit Hours**

Prerequisite: MS315

This course integrates information science, computer science, and cognitive science to acquire, process, design, and disseminate knowledge. The student will explore the use of information technology applications used by health care professionals to support the delivery of health care. Students will discuss the impact informatics has on the delivery of care including efficiency and productivity, client safety, confidentiality.

**IDS450 Holistic Approaches to Healthcare**

**4 Semester Credit Hours**

Prerequisites: NU350

This course introduces the use of complementary and integrative therapies in healthcare. The goal is to provide the student with knowledge and experience of mind/body self-healing skills, multi-cultural integrative healthcare theories, practice environments and interventions that can be used safely and effectively.

**MS110 College Algebra**

**3 Semester Credit Hours**

Prerequisite: None

This course includes a study of the fundamental algebraic processes. Topics will include real and rational numbers, radicals, monomials and polynomials, solution of first- and second-degree equations, inequalities, systems of linear equations in two and three unknowns, graphing of functions in Cartesian Coordinates, logarithms, determinants, and word problems.

**MS315 Statistics**

**4 Semester Credit Hours**

Prerequisites: MS110

This course studies the theory and application of statistics. Estimation will be conducted using properties of sufficient statistics and maximum likelihood estimators. Hypothesis tests will be developed for population means, proportions, chi-square tests of independence, as well as regression and ANOVA. Statistical hypothesis testing will be applied to real-world data sets using technology.

**NU100 Introduction to Foundational Nursing Concepts**

**4 Semester Credit Hours**

Prerequisites: EH111, MS110, SC101, ZO115, ZO116, and a GPA of 3.00 for ZO115 and ZO16.

Co-requisite: ZO211

This course introduces the student to concepts that provide the foundation for the professional practice of nursing, including nursing theory, the nursing process, critical thinking, and professional behaviors. Emphasis is also placed on concepts related to the healthcare system and patient-centered care. NU100 involves a laboratory experience which provides an opportunity for students to develop basic patient-centered nursing skills. Medical terminology and dosage calculations are integrated into the course.

**NU110 Nutrition**

**2 Semester Credit Hours**

Prerequisites: ZO115, ZO116, PY202

This course provides an integrated overview of the physiological requirements and functions of protein, energy, and the major vitamins and minerals that are determinants of health and diseases in human populations.

**NU125 Foundational Nursing Concepts II****5 Semester Credit Hours**

Prerequisites: NU100 and ZO211.

Co-requisite: NU140

This course builds on the concepts learned in NU100, continuing to focus on principles essential to the nursing profession. Concepts related to patient-centered care are emphasized. NUR125 has a nursing lab component. The basic skills of health assessment will be introduced. Other skills include medication administration, aseptic technique, and IV therapy. NUR125 provides a clinical experience in the long-term care facility where the student will begin to utilize the nursing process as the means of providing basic nursing care to meet the holistic needs of an elder.

**NU140 Pharmacology and the Nursing Process****3 Semester Credit Hours**

Prerequisites: MS110, ZO115, ZO116, and ZO211.

Co-requisite: NU125

This course will focus on the principles of pharmacology and the major drug classifications in relation to the treatment of health problems throughout the lifespan. Emphasis will be placed on the knowledge and interventions needed to maximize therapeutic effects and prevent or minimize adverse effects of medications.

**NU180 Nursing Concepts Across the Lifespan I****6 Semester Credit Hours**

Prerequisites: NU125, NU140

Co-requisite: PY202

This course will focus on holistic nursing care and the application of the nursing process in the care of the patients across the lifespan who are experiencing common selected pathophysiological processes affecting body regulatory mechanisms. Pharmacology and diet therapy are integrated throughout the course. This course builds upon basic nursing knowledge and skills established during prior previous fundamental nursing courses. Opportunities to apply theoretical concepts and perform nursing skills are provided through faculty guided clinical/learning experiences in acute health care settings.

**NU210 Nursing Concepts Across the Lifespan II****5 Semester Credit Hours**

Prerequisites: NU180 and SC101

Co-requisite: EH102

This course will introduce the student to the psycho-social-cultural health of the individual from conception through adolescence. Included in this course are concepts of pregnancy, labor and delivery, post-partum, newborn, child growth and development, health maintenance and prevention, from infancy through late adolescence. Other concepts include nutrition, communication, and pharmacology. The student will further develop health assessment and nursing care skills for maternity, newborn, and pediatric patients. Common childhood illnesses will be introduced. The student will expand skills in the use of the nursing process and critical thinking in meeting maternal/child healthcare needs within the family system, well child, and acute care settings.

**NU230 Nursing Concepts Across the Lifespan III****6 Semester Credit Hours**

Prerequisites: NU210

This course will focus on holistic nursing care and the application of the nursing process in the care of the patients across the lifespan who are experiencing common selected pathophysiological processes affecting body regulatory mechanisms. This course will feature care of patients with common mental health disorders. The student will continue to expand skill levels in the use of the nursing process by providing holistic care in acute care and community health. The student will further develop therapeutic communication techniques and psycho-social

assessments for these individuals. Student learning is focused on mood disorders, safety/substance abuse issues, violence, suicide, developmental age related pathophysiology, grief/loss, and psychopharmacology.

#### **NU260 Nursing Concepts Across the Lifespan IV**

**6 Semester Credit Hours**

Prerequisites: NU230

This course continues to focus on the holistic nursing care of patients across the lifespan who are experiencing complex pathophysiological processes affecting body regulatory mechanisms. Students will use critical thinking and the nursing process when providing direct nursing care, or managing the care for a group of patients in the hospital setting. Nursing management skills, such as time management, prioritization, and delegation will be emphasized. This course will also allow students the opportunity to demonstrate the final achievement of graduate competencies and to refine their nursing care practice skills. Pharmacology and diet therapy are integrated throughout the course. This course builds upon the nursing knowledge and skills established during prior nursing courses. Opportunities to use theoretical concepts and perform advanced nursing skills are provided through faculty guided clinical/learning experiences in acute health care settings.

#### **NU350 Evidence-Based Practice in Healthcare**

**4 Semester Credit Hours**

Prerequisites: NU260, MS315

This course exposes the student to the role of research in professional nursing practice and the principles and models of evidence-based practice. The student will be introduced to quantitative and qualitative research by reviewing, evaluating and critiquing current research which use a variety of designs. Students will consider their own Capstone project when applying methods of nursing research related to evidence-based practice.

#### **NU410 Community and Population Health Nursing**

**4 Semester Credit Hours**

Prerequisite: NU350

This course reviews concepts and theories related to public, family, community, and population health. Emphasizing the role of the nurse in sustaining, restoring, and promoting health among diverse populations is explored. Principles of epidemiology and the influence of factors impacting the health and wellness of local and global communities are incorporated. The opportunity for students to collaborate within their community is explored using assessment tools to improve health outcomes. This course includes a practice component within a community health setting.

#### **NU425 Transcultural Perspectives in Healthcare**

**4 Semester Credit Hours**

Prerequisites: NU350

This course recognizes the importance of providing and incorporating cultural beliefs and experience of client, families, and their health care professionals with care settings. Topics include comparative analysis of communication styles, fostering open communication, family roles, dietary preferences, safety and concerns associated with cultural beliefs, values and practices of cultural norms, and the impact of health care practice. Nursing interventions that integrate and examine evidence-based practice related to various cultural beliefs will be discussed. The importance of incorporating a holistic approach in the care and treatment of the client will be demonstrated within this course.

**NU460 Leadership: Trends in the Changing Healthcare Environment****4 Semester Credit Hours**

Prerequisites: NU350

This course focuses on the principles of management and leadership in the delivery of healthcare. An overview of theories assists the student in the understanding of legal and ethical implications related to the role of the professional nurse in regard to care, staffing, budgeting, quality improvement, safety concerns, and other issues. Content includes current trends and issues in healthcare leadership and management and the contribution of the professional nurse. Analysis of the capstone project in relationship to changes in practice will be reviewed.

**NU480 BScN Transition to Nursing Practice****4 Semester Credit Hours**

Prerequisites: All Concentration Courses in the Bachelors in Nursing program

This course is designed for students to explore current issues and trends in nursing and the healthcare system that impact the practice of the Bachelor Degree Nurse. Student learning is focused on nursing professionalism and image, legal and ethical issues, the economics of health care, nursing management and leadership, and the interpersonal relationships among healthcare professionals. Preparation for licensure and the continuation of a student's nursing education is discussed. This course includes preceptor experiences that provide student opportunities to understand diverse professional nursing roles in a variety of healthcare settings.

**PY101 Introduction to Psychology****3 Semester Credit Hours**

Prerequisites: None

The student, introduced to the nature and objectives of psychology, develops an appreciation of psychological research and findings. This course focuses on individual development--heredity and environment, conditioning processes, conflict and anxiety and defense mechanisms. Consideration is also given to interaction through social processes (group dynamics) in terms of dealing with reality and eventual self-actualization.

**PY202 Lifespan Development****3 Semester Credit Hours**

Prerequisites: None

This course is designed to assist the student in gaining a general, foundational knowledge of human development across the lifespan. The student will look closely at the three spheres of development essential to this process: physical, cognitive, and social. Students will draw from their own experiences as well as be introduced to the most current understanding and literature regarding development.

**SC101 Introduction to Sociology****3 Semester Credit Hours**

Prerequisite: None

This course introduces the student to the study of society and the interaction of individuals within a society. Major areas of study include the concepts and theory of sociology, culture, social structure and social change.

**ZO115 Human Anatomy and Physiology of the Structural Systems****4 Semester Credit Hours**

Prerequisite: None

In this course, basic bio-organization and six areas of the body structural systems are studied. The gross and microscopic structures and function of integumentary system, skeletal system, muscular system, nervous system, endocrine system and special senses are explored. Emphasis is placed on the diseases and diagnostic procedures related to each of these systems. This course involves both lecture and lab components.

**ZO116 Human Anatomy and Physiology of the Organ Systems****4 Semester Credit Hours**

Prerequisite: None

The gross and microscopic structures and function of the blood, the male and female reproductive systems, cardiovascular system, lymphatic system, respiratory system, digestive system, and urinary system are explored. Emphasis is placed on the diseases and diagnostic procedures related to each system. This course involves both lecture and lab components.

**ZO211 Microbiology****4 Semester Credit Hours**

Prerequisite: ZO115, ZO116

Co-Requisite for Nursing Program: NU100

This course uses biological principles to help the student understand microorganisms as they relate to health sciences. Learning is focused on the metabolism, the environment, and the genetics of microorganisms. Topics include the body's response to microorganisms, disease, and the body's defense mechanisms, the infection cycle, and transmission from host to host. Chemistry is integrated for understanding the enzymatic functions and microbial physiology. This course includes a laboratory which explores the physiological, nutritional, and environmental needs of bacteria and fungi. Sterilization techniques, the use of the microscope, and the antibiotic susceptibility of bacteria are also studied. Laboratory activities include cultivation techniques, microscopy, biochemical assays, immunoassays and identification. This course involves both lecture and lab components.

**ZU310 Genetics****4 Semester Credit Hours**

Prerequisites: ZO211

This course prepares the student with a general knowledge of gene structure and the human genomes organization and function. The topics will explore the structure and function of genes, chromosomes and genomes, biological variation resulting from recombination, mutation, and selection, population genetics, use of genetic methods to analyze protein function, gene regulation and inherited diseases.