



CAMP

COLLEGE OF ALLIED MEDICAL PROFESSIONS

STUDENT HANDBOOK



LPU
THE PHILIPPINE UNIVERSITY
BATANGAS



COLLEGE OF ALLIED MEDICAL PROFESSIONS

LYCEUM OF THE PHILIPPINES UNIVERSITY
Capitol Site, Batangas City

Effectivity
AY 2021-2022

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LYCEUM OF THE PHILIPPINES UNIVERSITY

LPU UNIFIED VISION

An internationally accredited university dedicated to innovation and excellence in the service of God and country

LPU BATANGAS CAMPUS VISION

To be a recognized industry-driven university in the Asia Pacific Region by 2026

LPU BATANGAS CAMPUS MISSION

LPU-B, espousing the ideals of Jose P. Laurel, is dedicated to develop innovative leaders, lifelong learners and globally competitive professionals constantly in pursuit of truth and acts with fortitude (Veritas Et Fortitudo) to serve God and country (Pro Deo Et Patria)

LPU-B CORE VALUES

G - God-centeredness

L - Leadership

I - Integrity

N - Nationalism

C - Collaboration

S - Service Orientation

INSTITUTIONAL QUALITY POLICY

The Lyceum of the Philippines University (LPU) is committed to provide quality education, training and services to its students to achieve optimum customer satisfaction and to be responsive to the need for continuous improvement.

The quality objectives shall be formulated, implemented, monitored and evaluated in accordance with the quality policy.

All our instruction, research and community extension activities shall be marked with quality in compliance with industry standards and applicable statutory and regulatory requirements of different local and international certifying / accrediting bodies / agencies.

All our facilities, resources, and efforts shall be dedicated to deliver quality education, training, and services in consideration of risk management. This policy shall be communicated to, understood and applied by the LPU-B Family.

LAURELIAN GRADUATE ATTRIBUTES: 4Cs

Graduate attributes are the competencies, attributes, and understanding that the university aims to help the students develop by the time they graduate.

1. Competent and Innovative Learners
2. Committed and Lifelong Learners
3. Credible and Values-driven Leaders
4. Collaborative and Caring Team Leaders.

12 GRADUATE COMPETENCIES

Competencies are qualities a student possess, combining skills, knowledge, and abilities.

1. Discipline-specific competencies (C1)
2. Communication skills (C1)
3. Problem-solving, critical, and cognitive thinking (C1)
4. Information Technology skills (C1)
5. Entrepreneurial skills (C1)
6. Analytical thinking and innovation skills (C1)
7. Lifelong learning (C2)
8. Integrity (C3)
9. Values-driven Leadership (C3)
10. Interpersonal/Social skills (C4)
11. People Management skills (C4)
12. Service-oriented (C4)

COLLEGE OF ALLIED MEDICAL PROFESSIONS

COLLEGE VISION

The College of Allied Medical Professions of Lyceum of the Philippines University envisions itself as a center of excellence in the allied health professions in the local and international community.

COLLEGE MISSION

The College of Allied Medical Professions of Lyceum of the Philippines University is designed to ensure the development of competent allied

health professionals who have acquired the necessary knowledge, skills, and proficiency needed in the practice of their respective professions, and the ethical values which are needed in the pursuance of the overall social, mental, and physical health of the community and country.

ADMISSION POLICY

The LYCEUM OF THE PHILIPPINES UNIVERSITY-BATANGAS COLLEGE OF ALLIED MEDICAL PROFESSIONS shall accept anyone who prefers to take any of the following programs such as Bachelor of Science in Medical Laboratory Science, Bachelor of Science in Physical Therapy, Bachelor of Science in Radiologic Technology, Bachelor of Science in Pharmacy, and Bachelor of Science in Biology provided that:

1. the enrollee has obtained a rate of at least Stanine 4 (BMLS, BSPT, BSRT, BS Pharma) and Stanine 3 (BS Bio) in the entrance examination given by the Counseling and Testing Center of LPU-B;
2. the enrollee has obtained at least 85% average grade in Grade 12 with no grades below 80% in Science, Math, and English courses;
3. the enrollee shall agree to abide by the policies, rules, and regulations of CAMP and LPU-B; and
4. the enrollee has a negative Hepatitis B screening result and hepatitis B vaccination.

LIMITED RETENTION POLICY

The LYCEUM OF THE PHILIPPINES UNIVERSITY-BATANGAS COLLEGE OF ALLIED MEDICAL PROFESSIONS reserves the right NOT TO ALLOW a student to continue with their respective program based on the following specific LIMITED RETENTION POLICIES of the College.

1. After admission to their respective program, the student is expected to pass all the courses including electives as prescribed in the curriculum.
2. The following General Weighted Average (GWA) shall be required for admission to higher years of study:
 - a. For incoming Second Year students: 2.75 GWA
 - b. For incoming Third Year students: 2.75 GWA
 - c. For incoming Fourth Year students: 2.70 GWA
3. Failure in three or more general education and core courses in a single semester or a cumulative of five failing grades in general education and core courses upon admission to LPU will mean

- dismissal from the College.
4. Students who shall incur a grade of UD in two or more courses in a single semester or a cumulative of four upon admission at LPU-B without valid grounds/argument/alibi OR a failing grade in at most two (2) courses may be readmitted for the following semester under PROBATIONARY STATUS and will be required to sign a waiver that must be witnessed by the faculty class adviser and a parent or guardian. A student who fails to meet the required GWA and/or fails a course two times shall likewise be classified under PROBATIONARY STATUS
 5. Students who obtained a grade of 5.0 in any course will be allowed to repeat the course only once to retain the right for a regular load of courses. If a student fails for the second time in any given course, they shall be classified under PROBATIONARY STATUS. Students who fail any course for the third time will be dismissed from the College.
 6. Students under PROBATIONARY STATUS cannot enroll in a full load of courses for a given semester regardless of the credit/s attained for any pre-requisite course/s. All students classified under the said status can only enroll in a maximum of fifteen (15) units per semester. A student under the said status who garners more than two (2) failing grades OR UD shall no longer be admitted for enrollment.
 7. For professional courses (board courses), the student must pass both the lecture and laboratory portions of the course to be eligible to take up the next higher professional course. Students who fail either the lecture or laboratory portion of a professional course must re-enroll in that course.
 8. No student will be admitted for re-enrollment if he/she fails in two or more professional courses (board courses) in a single semester or a cumulative of four failing grades in core/professional courses.
 9. Students who fail to comply with the rules, regulations, policies, and requirements of the University in general and/or the College of Allied Medical Professions, in particular, shall be subjected to the appropriate penalty as outlined in the LPU-B Student Manual after due process has been observed. Very specifically, at any phase of the program, a student may be expelled, eliminated, dismissed, or asked to withdraw after the due process on any of the following grounds.
 - a. gross misconduct in the classroom or clinical area;
 - b. immorality in any form;
 - c. drug abuse;
 - d. illegal termination of pregnancy;

- e. serious error/variance in the clinical area due to negligence which may have a direct or indirect adverse effect on the condition of the patient;
- f. incapacitating diseases such as psychosis, cancer, heart disease, lung ailment, and/or communicable disease, supported with a medical certificate from the University Physician;
- g. membership and/or involvement in any fraternity/sorority organizations and activities;
- h. other grounds as deemed appropriate by the University and/or the College.

BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCE

PROGRAM DESCRIPTION

PROGRAM EDUCATIONAL OBJECTIVES

Graduates of the BS Medical Laboratory Science program are expected to attain the following objectives 3-5 years after graduation:

1. Be gainfully employed either local or abroad
2. Have assumed leadership and supervisory roles in clinical laboratories and related fields
3. Have engaged in lifelong learning through continuing education and membership in a professional organization
4. Participated in any research-related activities and civic works that will contribute to community development

STUDENT OUTCOMES

- a. **Demonstrate technical competence in the performance of clinical laboratory tests in aid of diagnosis, treatment and management of diseases cis-a-vis biosafety and waste management.**

Performance Indicators

1. Collect, handle, and process biological specimens properly and safely
2. Perform laboratory testing accurately through the use of appropriate techniques, skills, and technology
3. Analyze and interpret laboratory test data

4. Monitor testing procedures, equipment, and professional/technical competency using quality assurance methodologies
5. Operate instruments properly and perform appropriate preventive and corrective maintenance
6. Adhere to all laboratory safety rules and regulations
7. Use computers and laboratory software competently
8. Discuss appropriate and novel technology for Medical Technology/ Medical Laboratory Science application
9. Evaluate new procedures and instruments
10. Apply principles of educational methodology and laboratory management

b. Demonstrate analytical and critical thinking skills in the workplace

Performance Indicators

1. Demonstrate skills in quality assurance and continuous quality improvement
2. Evaluate the validity of the generated data and assure its reliability before reporting
3. Recognize errors/problems and perform root cause analysis to establish a course of action
4. Apply the principles of educational methodology and resource management

c. Engage in the collection, analysis, and protection of health information for improving the health care management system.

Performance Indicators

1. Collect health information for health care management
2. Analyze health information
3. Interpret health information data
4. Contribute to designing and planning a course of action to address health concerns and issues.

d. Demonstrate inter-personal skills, leadership qualities, entrepreneurial skills, and ethical practice of the profession.

Performance Indicators

1. Work effectively with peers, with multi-disciplinary, and

multicultural teams

2. Demonstrate good inter-personal skills with patients and co-worker
3. Plan and organize activities
4. Practice professionalism
5. Demonstrate capacity to solve problems with minimal supervision and propose ways to improve process flows
6. Demonstrate basic entrepreneurial skills
7. Practice the principles of data security and patient's confidentiality
8. Exhibit ethical behavior

e. Apply research skills in relevant areas of Medical Technology/ Medical Laboratory Science practice

Performance Indicators

1. Identify research topic relevant to Medical Technology/Medical Laboratory Science
2. Use appropriate research methods
3. Perform the research according to plan
4. Analyze and interpret research data
5. Disseminate research results

f. Participate in community-oriented activities

Performance Indicators

1. Engage in community-oriented activities
2. Plan and organize medical technology-related activities in the community
3. Apply the principles of good practice in community service and social responsibility
4. Implement, monitor, and evaluate activities in the community

g. Engage in lifelong learning activities

Performance Indicators

1. Discuss trends/developments in Medical Technology/Medical Laboratory Science practice
2. Participate in professional organizations
3. Engage in continuing professional development activities

h. Demonstrate effective teaching and communication skills

Performance Indicators

1. Provide proper information and instruction to patients
2. Implement proper classroom management and instruction
3. Follow oral and written instructions
4. Prepare correct communication materials

Communicate effectively across multiple platforms

i. Demonstrate responsible citizenship and pride in being Filipino

Performance Indicators

1. Analyze selected readings contextually and in terms of content (stated and implied) covering Philippine history to enable students to understand and appreciate rich past events
2. Analyze crucial qualities of the Filipino moral identity in their own experience and existence at various levels
3. Examine the contemporary world from both Philippine and global perspectives
4. Demonstrate patriotism
5. Support and promote Philippine culture, values, and practices

j. Apply knowledge of physical, social, natural and health sciences and humanities in the practice of the profession

Performance Indicators

1. Demonstrate a better understanding of their personality, self, and identity and basics skills in managing and caring for the self
2. Identify the challenges posed by globalization from a variety of perspectives and its effects on traditional cultures and communities, local, national, and regional economies
3. Appreciate and contribute to artistic beauty
4. Reflect critically on shared concerns and thin innovative, creative solutions guided by ethical standards
5. Apply different analytical models in tackling problems methodically

BACHELOR OF SCIENCE IN PHARMACY PROGRAM

Pharmacy is a health profession that integrates the health sciences with chemical sciences. It is the art and science of biological agents used as drugs for the prevention, diagnosis, cure, and treatment of diseases of man and animals. The study of pharmacy is founded on the identification, discovery, isolation, synthesis, and formulation of

biologically active compounds for clinical use. Pharmacists are not just experts on drug formulation but also authorities on drug use.

PROGRAM EDUCATIONAL OBJECTIVES

Graduates of the BS Pharmacy program are expected to attain the following objectives 3-5 years after graduation:

1. Be gainfully employed either local or abroad; or manage own community pharmacy
2. Have assumed leadership and supervisory roles in pharmacy and related fields.
3. Have engaged in lifelong learning through continuing education and membership in professional organization
4. Participated in any research-related activities and civic works that will contribute to community development

STUDENT OUTCOMES

a. Demonstrate theoretical knowledge and technical skills required for career entry into the Pharmacy profession

Performance Indicators

1. Acquire knowledge of active pharmaceutical ingredients and drug products
2. Monitor testing of therapeutic agents, procedures, equipment, and professional/technical competency using quality assurance methodologies
3. Operate instrumentation properly and perform appropriate and corrective maintenance
4. Adhere to all laboratory and work safety rules and regulations
5. Skillfully use information technology to access, follow, and apply current knowledge in the field of pharmaceutical sciences
6. Perform Identification, quality control, and standardization of drug products
7. Critically evaluate their knowledge in pharmaceutical sciences

b. Demonstrate communication skills required to practice in the profession

Performance Indicators

1. Follow verbal and written instruction
2. Communicate effectively all necessary information about medicines to patients, medical personnel, and the public using

culturally appropriate language

3. Facilitate learning of selected learners for specific purposes
4. Exhibit responsible use of non-verbal clues, pictures, graphics, and images in oral, written, and online communication

c. Demonstrate interpersonal skills, leadership qualities, and entrepreneurial skills

Performance Indicators

1. Work effectively with peers, with multi-disciplinary, and multicultural teams
2. Demonstrate good interpersonal skills with patients and co-workers
3. Plan and organize activities
4. Demonstrate capacity to solve problems with minimal supervision and propose ways to improve process flows
5. Demonstrate basic managerial and entrepreneurial skills

d. Demonstrate professional, social, and ethical responsibility

Performance Indicators

1. Develop awareness of his/her duties, rights, and responsibilities and act based on the Pharmacy law and high professional ethical standards
2. Acquire knowledge of regulatory rules of new and current drug applications, data protection, and patent issues and understand their interrelationship
3. Practice professionalism
4. Integrate ethical principles into one's professional conduct and exhibit ethical behavior
5. Practice the principles of data security and patient confidentiality
6. Participate in community extension activities

e. Conduct relevant research and disseminate findings

Performance Indicators

1. Critically appraise research evidence
2. Prepare a proposal according to the guidelines of scientific research
3. Conduct or participate in research according to technical and ethical standard.

f. Engage in lifelong learning and understanding of the need to keep abreast of the developments in the specific field of

practice

Performance Indicators

1. Discuss trends/developments in Pharmacy practice
2. Participate in professional organizations
3. Engage in continuing professional development activities

g. Apply knowledge of physical, social, natural, and health sciences and humanities in the practice of the profession

Performance Indicators

1. Demonstrate a better understanding of their personality, self, and identity and basics skills in managing and caring for the self
2. Identify the challenges posed by globalization from a variety of perspectives and its effects on traditional cultures and communities, local, national, and regional economies
3. Appreciate and contribute to artistic beauty
4. Reflect critically on shared concerns and thin innovative, creative solutions guided by ethical standards
5. Apply different analytical modes in tackling problems methodically

h. Demonstrate responsible citizenship and pride in being a Filipino

Performance Indicators

1. Analyze selected readings contextually and in terms of content (stated and implied) covering Philippine history to enable students to understand and appreciate rich past events
2. Analyze crucial qualities of the Filipino moral identity in their own experience and existence at various levels
3. Examine the contemporary world from both Philippine and global perspectives
4. Demonstrate patriotism
5. Support and promote Philippine culture, values, and practices

BACHELOR OF SCIENCE IN PHYSICAL THERAPY

Physical Therapy is an allied health profession, which develops, coordinates, and utilizes selected knowledge and skill in planning, organizing, directing and evaluating programs for the care of individuals whose ability to function is impaired or threatened by disease or injury. It is the art and science of working with people to maintain and

restore optimal movement and functional ability throughout the lifespan.

PROGRAM EDUCATIONAL OBJECTIVES

Graduates of the BS Physical Therapy program are expected to attain the following objectives 3-5 years after graduation:

1. Be gainfully employed either local or abroad
2. Have assumed leadership and supervisory roles in Physical Therapy and related fields
3. Have engaged in lifelong learning through continuing education and membership in a professional organization
4. Participated in any research-related activities and civic works that will contribute to community development.

STUDENT OUTCOMES

- a. **Apply knowledge of physical sciences, social sciences, healthsciences, and natural sciences to the practice of physical therapy**

Performance Indicators

1. Appreciation of the human condition
2. Knowledge of human behavior and performance, individual differences in ability, personality, and interests, and learning and motivation
3. Capacity to personally interpret the human experience
4. Ability to view the contemporary world from both Philippine and global perspectives
5. Self-assuredness in knowing and being Filipino
6. Capacity to reflect critically on shared concerns and think of innovative, creative solutions guided by ethical standards
7. Aptitude in tackling problems methodically and scientifically
8. Ability to appreciate and contribute to artistic beauty
9. Understanding and respect for freedom of religion and belief in God
10. Ability to contribute personally and meaningfully to the country's development

- b. **Demonstrate consistent competence in conducting a comprehensive examination, evaluation, and assesment of patients/ clients across the lifespan within a broad continuum of care**

Performance Indicators

1. Utilize sound clinical reasoning skills in examination, evaluation, and assessment of patients/ clients including determining the prognosis.
2. Select and effectively utilize relevant, valid, reliable, and sensitive measures of health outcomes to determine and screen the health status of patients/ clients
3. Formulate a physical therapy diagnosis for the patient/ client and determine the need for referral to appropriate qualified service providers
4. Accurately and completely document results of the examination, evaluation, and assessment according to accepted standards and communicate the resultst to the patients/ clients and other stakeholders

- c. **Demonstrate consistent competence in planning and implementing appropriate physical therapy interventions for patients/ clients across the lifespan within a broad continuum of care**

Performance Indicators

1. Identify and prioritize problems that may be addressed by physical therapy interventions while utilizing sound clinical reasoning skills in planning and implementing appropriate physical therapy interventions.
2. Formulate specific, measurable, attainable, realistic, and time-bound goals for patients/ clients
3. Select appropriate and cost-effective interventions for various patient/client populations and practice settings, and effectively implement interventions to address client population needs
4. Re-evaluate outcomes of interventions given to client populations and modify intervention plan as needed, and communicate results of re-evaluation and plan modification to patients/ clients and other relevant stakeholders
5. Determine the need for continuance of treatment, discharge from treatment, or referral to appropriate qualified service providers
6. Accurately and completely document results of interventions according to accepted standards

- d. **Demonstrate the use of teaching-learning principles and proficiency in oral and written communication as well as reading and listening in different learning environments**

Performance Indicators

1. Develop an instructional plan appropriate to identified learners, as follows: students, patients (age group, cognitive, and communication considerations), clients (individuals, groups, or institutions), family and caregivers, the general public (social status, education status, and gender considerations), peers, and other healthcare providers and professionals
2. Implement effectively appropriate teaching strategies to achieve learning objectives and evaluate achievement of learning objectives for the target audience
3. Provide feedback to identified learners to improve learning
4. Express thoughts and ideas effectively and proficiently in verbal and written forms using English and Filipino in formal and informal venues and complement verbal communication with appropriate non-verbal signs consistently
5. Demonstrate effective and appropriate use of available technology in various communication contexts
6. Demonstrate accuracy in documentation in the practice of physical therapy and observe prescribed guidelines in preparing written documents
7. Demonstrate reading comprehension at all levels and practice active listening
8. Relay information effectively while considering the number and characteristics of the audience

e. Practice beginning management, leadership, and entrepreneurial skills in various practice settings and work effectively in an interprofessional collaborative setting

Performance Indicators

1. Develop a plan for the attainment of identified goals appropriate to their practice settings: academe; clinical setting; community; research; homecare; industry; and wellness
2. Organize the internal structure of the practice environment and manage resources to ensure the attainment of identified goals
3. Determine the qualifications of staff necessary to implement the plan for the achievement of goals and objectives
4. Demonstrate effective managerial and leadership skills to influence behavior of the team towards the attainment of goals and objectives, and monitor and evaluate the team's performance based on identified goals to determine success
5. Contribute to the crafting of local policies to strengthen the institutionalization of physical therapy services

6. Demonstrate capacity to establish an independent professional practice model while utilizing basic entrepreneurial skills.
 7. Apply the concepts of customer and personal service and public safety and security in the delivery of physical therapy services
 8. Understand the role and scope of practice of physical therapists as well as other healthcare providers in the healthcare continuum
 9. Appreciate the roles of other stakeholders in the care of clients
 10. Accommodate other roles to adapt to the needs of the work setting
 11. Demonstrate appropriate behavior as a productive member of the team
 12. Show sensitivity and respect for the beliefs and values of others that may be different from one's own
 13. Communicate effectively through verbal, non-verbal, and written forms when dealing with other stakeholders
- ### **n. Demonstrate research-related skills in the application of best practice evidence in the performance of various roles in different practice settings**

Performance Indicators

1. Identify relevant practice questions based on a particular context
2. Conduct a systematic search of related research articles (best available evidence)
3. Critically appraise research articles using accepted standards
4. Utilize valid research findings in evidence-based practice, focusing on extracting the practical and clinical implications of research findings
5. Contribute to the development of institutional, local, national (and international when possible) programs and policies that can influence physical therapy practice and health in general
6. Demonstrate basic skills in conducting formal research
7. Effectively communicate research findings to an audience through oral and poster presentations
8. Draft a research report in its publishable form following the guidelines and standards of a chosen journal
9. Apply basic ethical principles and good clinical practice in health research
10. Exercise integrity in the conduct of research
11. Collaborate with researchers in other areas of specialization to generate research with broader application or impact
12. Identify and maximize sources of funding to support the conduct

of research

g. Promote health and improved quality of life through practice of the profession and maximize the use of innovative technology available

Performance Indicators

1. Assess the general state of health and quality of life in different client populations across the lifespan
2. Develop/ create/ enhance a plan for wellness and health promotion for different client populations across the lifespan
3. Implement a plan for wellness and health promotion for different client populations across the lifespan and evaluate the effectiveness of wellness and health promotion programs in improving the quality of life
4. Access relevant existing innovative technology
5. Adopt or develop existing technology relevant to the advancement or effective and efficient practice of the profession
6. Develop new technology to advance the effective and efficient practice of the profession

h. Actively engage in lifelong learning activities

Performance Indicators

1. Develop metacognitive skills that will allow for effective self assessment of levels of competence for the performance of tasks in various practice settings
2. Engage actively in self-directed learning strategies/ opportunities
3. Engage actively in formal and informal continuing professional development activities to remain updated with current trends in practice

i. Demonstrate social and professional responsibility, ethical behaviors, responsible citizenship, and pride in being a Filipino when transacting in any multi-cultural settings and scenarios

Performance Indicators

1. Respond to the needs of the physical therapy profession, other healthcare professions, and needs of the community-at-large as appropriate to one's level of competence and resources
2. Exercise integrity in all undertakings

3. Demonstrate appropriate professional behavior as a productive member of a team
4. Ensure that any decision and action will benefit others and will not result in any harm
5. Provide equal opportunities to everyone regardless of gender, race, religion, political affiliation, economic status, educational background, and societal position
6. Allow others to make informed decisions for themselves
7. Apply knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and any processes pertinent to the practice of physical therapy
8. Adhere to the physical therapy scope of practice and Code of Ethics
9. Analyze selected readings contextually and in terms of content (stated and implied) covering Philippine history to enable students to understand and appreciate rich past events
10. Analyze crucial qualities of the Filipino moral identity in their own experience and existence at various levels
11. Demonstrate patriotism
12. Support and promote Philippine culture, values, and practices

BACHELOR OF SCIENCE IN RADIOLOGIC TECHNOLOGY

Radiologic Technology is a health care profession whose practitioner works directly with the patient and the physician in performing a wide variety of diagnostic and interventional therapy procedures. Radiologic technologists use their expertise and knowledge of patient handling, physics, anatomy, physiology, pathology and radiology to assess patients, develop optimal radiologic techniques and evaluate resulting in radiographic images.

PROGRAM EDUCATIONAL OBJECTIVES

Graduates of the BS Radiologic Technology program are expected to attain the following objectives 3-5 years after graduation:

1. Be gainfully employed either local or abroad
2. Have assumed leadership and supervisory roles in Radiologic Technology and related fields
3. Have engaged in lifelong learning through continuing education and membership in a professional organization
4. Participated in any research-related activities and civic works that

will contribute to community development.

STUDENT OUTCOMES

a. Apply scientific knowledge, technical skills, and the proper work attitude and values necessary for the practice of Radiologic Technology

Performance Indicators

1. Perform radiologic procedures according to protocols
2. Position the patient correctly during a procedure
3. Produce high-quality radiographic images
4. Recognize problems in image quality and institutes measures to address them
5. Practice good housekeeping after every procedure
6. Demonstrate a good working relationship with colleagues

b. Understand the scope of local and international professional ethical practice

Performance Indicators

1. Observe "patient confidentiality" and other provisions of the patient bill of rights
2. Practice Code of Ethics of the Profession

c. Implement radiation safety and protection measures

Performance Indicators

1. Wear protective shields, e.g. lead aprons and goggles, when performing radiological procedures
2. Utilize the lowest possible exposure technique factors
3. Prevent unnecessary patient radiation exposure
4. Restrict persons in the exposure area during radiological procedures
5. Close the X-ray room and ensure that the red light is on during exposures

d. Demonstrate compassionate patient care

Performance Indicators

1. Explain and give clear instructions to patients before the

radiological procedure

2. Prepare a supply of fresh gowns for patients' use and provide privacy for patients' change of clothes before and after the procedure
3. Transfer patients from gurney or wheelchair to the X-ray table and vice-versa with minimum discomfort to the patient
4. Refrain from unnecessarily hurrying up patients to finish a procedure
5. Prioritize patients according to a set of protocols
6. Establish rapport and empathy toward the patient

e. Show beginning leadership, management, and entrepreneurial skills

Performance Indicators

1. Collaborate in planning activities for the department
2. Organize colleagues to participate in various activities
3. Propose ways to improve process flows and procedures
4. Solve small problems with minimal supervision
5. Recognize opportunities for entrepreneurship and demonstrate basic entrepreneurship skills
6. Support the implementation of new imaging innovations

f. Engage in academic and research activities

Performance Indicators

1. Apply teaching and learning principles to prepare students for their clinical practice
2. Assess student performance in the classrooms and the clinical areas
3. Conduct research studies related to the Radiologic Technology program

g. Promote the value of pursuing the lifelong learning

Performance Indicators

1. Recognize the need to regularly attend seminars and workshops
2. Read journals on current technological advancements and developments in the profession

h. Communicate effectively in speaking, writing, and presenting using culturally appropriate language

BACHELOR OF SCIENCE IN BIOLOGY

major in MEDICAL BIOLOGY

Biology major in Medical Biology provides students with fundamental concepts, principles, and theories of biological and medical sciences and the conduct of research. Medical biologists use their knowledge, skills, and training in performing scientific activities and research jobs.

PROGRAM EDUCATIONAL OBJECTIVES

Graduates of the BS Biology program are expected to attain the following objectives 3-5 years after graduation:

1. Be gainfully employed either local or abroad
2. Have assumed leadership and supervisory roles in Biology and related fields
3. Have engaged in lifelong learning through continuing education and membership in a professional organization
4. Participated in any research-related activities and civic works that will contribute to community development.
5. Pursue Doctor of Medicine

STUDENT OUTCOMES

- a. Develop an in-depth understanding of the basic principles governing the science of life**

Performance Indicator

1. Explain key concepts and theories in biology specifically in morphoanatomy, physiology, systematic biology, developmental biology,
2. genetics, ecology, microbiology, and cell and molecular biology

- c. Utilize techniques/procedures relevant to laboratory or fieldwork research setting to generate data**

Performance Indicators

1. Recognize the importance of relevant scientific data
2. Make an accurate and precise observations
3. Design proper/correct experiments for particular tasks
4. Conduct research relevant to the practice of the profession

- c. Apply basic mathematical and statistical computations and use appropriate technologies in the analysis of biological data**

Performance Indicators

1. Choose appropriate statistical tests for a given data set
2. Perform statistical techniques commonly used for analyzing

Performance Indicators

1. Write in different formats and platforms with clarity and efficiency
2. Demonstrate proficient and engaging delivery of speeches and other oral presentations
3. Exhibit responsible use of non-verbal clues, pictures, graphics, and images in oral, written, and online communication

- i. Ability to promote a love of country and service to the Filipino people**

Performance Indicators

1. Support National, Regional, and Local Development Plans for Health Care Programs
2. Advocate socio-civic involvement in the community
3. Promote a deep sense of genuine service towards Filipinos
4. Analyze selected readings contextually and in terms of content (stated and implied) covering Philippine history to enable students to understand and appreciate rich past events
5. Analyze crucial qualities of the Filipino moral identity in their own experience and existence at various levels
6. Examine the contemporary world from both Philippine and global perspectives
7. Demonstrate patriotism
8. Support and promote Philippine culture, values, and practices

- j. Apply knowledge of physical, social, natural, and health sciences and humanities in the practice of the profession**

Performance Indicators

1. Demonstrate a better understanding of their personality, self, and identity and basics skills in managing and caring for the self
2. Identify the challenges posed by globalization from a variety of perspectives and its effects on traditional cultures and communities, local, national, and regional economies
3. Appreciate and contribute to artistic beauty
4. Reflect critically on shared concerns and thin innovative, creative solutions guided by ethical standards
5. Apply different analytical modes in tackling problems methodically

biological data

- d. Extend knowledge and critically assess current views and theories through lifelong learning activities**

Performance Indicators

1. Discuss trends/developments in Medical Biology
2. Participate in scientific conferences and/or meetings of professional organizations and other continuing education and professional development

- e. Demonstrate interpersonal skills, leadership qualities, and entrepreneurial skills**

Performance Indicators

1. Work effectively with peers, with multi-disciplinary, and multicultural teams
2. Demonstrate good interpersonal skills, coordination, and decision making skills
3. Plan and organize activities
4. Solve problems with minimal supervision
5. Demonstrate basic entrepreneurship skills

- f. Effectively communicate orally and in writing using both the English and Filipino language**

Performance Indicators

1. Demonstrate effective oral and written communication using both English and Filipino languages
2. Exhibit adequate technical writing and oral communication

- g. Demonstrate professional, social, and ethical responsibility, especially in practicing intellectual property rights and sustainable development**

Performance Indicators

1. Articulate the contribution of one's profession to society and nation building
2. Practice professionalism
3. Adhere to data integrity and respect for intellectual property rights
4. Exhibit ethical behavior

- h. Apply knowledge of physical, social, natural, and healthsciences and humanities in the practice of the profession**

Performance Indicators

1. Demonstrate a better understanding of their personality, self, and identity and basics skills in managing and caring for the self
2. Identify the challenges posed by globalization from a variety of perspectives and its effects on traditional cultures and communities, local, national, and regional economies
3. Appreciate and contribute to artistic beauty
4. Reflect critically on shared concerns and thin innovative, creative solutions guided by ethical standards
5. Apply different analytical modes in tackling problems methodically
6. Participate in community extension activities

- i. Demonstrate responsible citizenship and pride in being a Filipino**

Performance Indicators

1. Analyze selected readings contextually and in terms of content (stated and implied) covering Philippine history to enable students to understand and appreciate rich past events
2. Analyze crucial qualities of the Filipino moral identity in their own experience and existence at various levels
3. Examine the contemporary world from both Philippine and global perspectives
4. Demonstrate patriotism
5. Support and promote Philippine culture, values, and practices

**DIPLOMA IN PHLEBOTOMY PROGRAM LEADING TO BS
MEDICAL LABORATORY SCIENCE PROGRAM**

FIRST YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Ana &Physio	Human Anatomy & Physiology with Patho- physiology	3	2	3	6	
BCS 1	Being Skills Course 1	1.5	0	1.5	0	
Chem 1	Inorganic and Organic Chemistry	3	2	3	6	
GEC-MATH	Mathematics in the Modern World	3	0	3	0	
GEC-UTS	Understanding the Self	3	0	3	0	
NSTP 1	National Service Training Program 1	3	0	3	0	
PE 1	Physical Fitness and Gymnastics	2	0	2	0	
Prin 1	Principles of Medical Laboratory Science Practice 1	3	0	3	0	
TOTAL		21.5	4	21.5	12	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BCS 2	Being Skills Course 2	1.5	0	1.5	0	BSC 1
Chem 2	Analytical Chemistry (Qualitative & Quantitative)	3	2	3	6	Chem 1
GEC-PCOM	Purposive Communication	3	0	3	0	
MLS 101	Health Information System for Med Lab Science	2	1	2	3	Prin 1
NSTP 2	National Service Training Program 2	3	0	3	0	
PE 2	Rhythmic Activities	2	0	2	0	PE 1
Phleb 101	Laboratory Assisting Principles and Procedures with Medical Terminology	3	0	3	0	
Prin 2	Principles of Medical Laboratory Science Practice 2	3	1	3	3	Prin 1
TOTAL		21.5	4	21.5	12	

Term Break

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
GEC-ETHICS	Ethics	3	0	3	0	
MLS 102	Cytogenetics	3	0	3	0	Ana & Physio
MLS 103	Principles and Strategies of Teaching in Med Lab Science	3	0	3	0	Prin 1
TOTAL		9	0	9	0	

SECOND YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Biostat	Biostatistics & Epidemiology	2	1	2	3	Math 1
Chem 3	Biochemistry for Med Lab Science	3	2	3	6	Chem 2
EPC	English Proficiency Course	3	0	3	0	GEC-PCOM
GEC-ART	Art Appreciation	3	0	3	0	
GEC-RPH	Readings in Philippine History	3	0	3	0	
Health Care	Community and Public Health for Med Lab Science	2	2	2	6	Ana & Physio
PE 3	Individual- Dual Sports & Games	2	0	2	0	PE 2
Phleb 102	Principles of Phlebotomy and Clinical Specimen Processing	2	1	2	3	Ana & Physio
TOTAL		20	6	20	18	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Entrep	Entrepreneurship	3	0	3	0	Phleb 102
FL	Foreign Language	3	0	3	0	

Second Semester (cont.)

MLS 201	Laboratory Management	2	0	2	0	Phleb 102
MLS 202	Human Histology	2	1	2	3	Ana & Physio
GEC-STC	Science, Technology and Society	3	0	3	0	
PE 4	Team Sports and Games	2	0	2	0	PE 3
Phleb 103	Phlebotomy Clinical Practicum 1	0	3	0	9	Phleb 102
Rizal	Life and Works of Rizal	3	0	3	0	
TOTAL		18	4	18	12	

Term Break

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
GEC-TCW	The Contemporary World	3	0	3	0	
MLS 203	Medical Technology Laws and Bioethics	3	0	3	0	Prin 1, Ethics
Phleb 104	Phlebotomy Clinical Practicum 2	0	3	0	9	Phleb 103
TOTAL		6	3	6	9	

BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCE**THIRD YEAR****First Semester**

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
MLS 301	Clinical Chemistry 1	3	2	3	6	Diploma in Phlebo
MLS 302	Hematology 1	3	1	3	3	Diploma in Phlebo
MLS 303	Analysis of Urine and Other Body Fluids	3	1	3	3	Diploma in Phlebo

First Semester (cont.)

MLS 304	Clinical Bacteriology	3	2	3	6	Diploma in Phlebo
MLS 305	Histopathologic & Cytologic Techniques	2	1	2	3	Diploma in Phlebo
MLS 306	Clinical Parasitology	3	1	3	3	Diploma in Phlebo
MLS 307	Introduction to Medical Laboratory Science Research	1	1	1	1	Diploma in Phlebo
TOTAL		18	9	18	27	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
MLS 308	Clinical Chemistry 2	3	2	3	6	MLS 301
MLS 309	Hematology 2	2	1	2	3	MLS 302
MLS 310	Immunology & Serology	3	1	3	3	Diploma in Phlebo
MLS 311	Immunohematology and Transfusion Medicine	3	1	3	3	Diploma in Phlebo
MLS 312	Molecular Biology and Diagnostics	1	2	1	6	Diploma in Phlebo
MLS 313	Mycology and Virology	2	0	2	0	MLS 304
MLS 314	Med Lab Science Research Paper Writing & Presentation	1	2	1	6	MLS 307
TOTAL		15	9	15	27	

FOURTH YEAR**First Semester**

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
MLS 401	Clinical Internship 1	0	12			Level I-III

First Semester (cont.)

MLS 401	Seminar 1	1	0	1	0	Level I-III
MTAP 1	Medical Technology Assessment Program 1	0	3	0	9	Level I-III
	TOTAL	1	15	1	9	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
MLS 403	Clinical Internship 2	0	12			MLS 401
MLS 404	Seminar 2	1	0	1	0	MLS 402
MTAP 2	Medical Technology Assessment Program 2	0	3	0	9	MTAP 1
	TOTAL	1	15	1	9	

DIPLOMA IN PHARMACY ASSISTING LEADING TO BACHELOR OF SCIENCE IN PHARMACY

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
AnaPhy	Human Anatomy and Physiology	3	2	3	6	
BCS 1	Being Skills Course 1	1.5	0	1.5	0	
GEC-PCOM	Purposive Communication	3	0	3	0	
GEC-UTS	Understanding the Self	3	0	3	0	
Phar 1	Perspectives in Pharmacy	3	0	3	0	

First Semester (cont.)

Phar Chem 1	Pharmaceutical Inorganic Chemistry (w/ Qualitative Analysis)	3	2	3	6	
NSTP 1	National Service Training Program 1	3	0	3	0	
PE 1	Physical Fitness and Gymnastics	2	0	2	0	
	TOTAL	21.5	4	21.5	12	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BCS 2	Being Skills Course 2	1.5	0	1.5	0	BCS 1
Phar 2	Pharmaceutical Calculations and Techniques	2	1	2	3	
PharBot	Pharmaceutical Botany with Taxonomy	2	1	2	3	
Phar Chem 2	Pharmaceutical Organic Chemistry	3	2	3	6	Phar Chem 1
Phar Chem 3	Pharmaceutical Analysis 1 (Quantitative Pharmaceutical Chemistry)	3	1	3	3	Phar Chem 1
PhyPath	Human Physiology and Pathophysiology	3	1	3	3	AnaPhy
NSTP 2	National Service Training Program 2	3	0	3	0	NSTP 1
PE 2	Rhythmic Activities	2	0	2	0	PE 1
	TOTAL	19.5	6	19.5	18	

Term Break

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Phar Care 1	Introduction to Health Care Systems	2	0	2	0	Phar 1

Term Break (cont.)

Phar Ad 1	Introduction to Pharmacy Administration, Management, and Leadership	2	0	2	0	Phar 1
Phar Care 2	Dispensing 1 (Dispensing Process, Reading & Interpreting the Prescription and Other Medication Orders)	1	2	1	6	Phar 2
TOTAL		5	2	5	6	

SECOND YEAR
First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Phar 3	Pharmaceutical Dosage Forms, Drug Delivery Systems, and Medical Devices	2	2	2	6	Phar 2
Phar 4	Physical Pharmacy	2	1	2	3	Phar 3*
PHBS 1	Pharmaceutical Botany with Taxonomy	3	1	3	3	Phar Chem 2, PhyPath
PhMcrPrs	Pharmaceutical Microbiology and Parasitology	3	2	3	6	PhyPath
Phar Care 3	Complementary and Alternative Medicine	1	0	1	0	Phar Care 2
Rizal	Life and Works of Rizal	3	0	3	0	
GEC-MATH	Mathematics in the Modern World	3	0	3	0	
PE 3	Individual- Dual Sports & Games	2	0	2	0	PE 2
TOTAL		19	6	19	18	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
EPC	English Proficiency Course	3	0	3	0	GEC-PCOM
FL	Foreign Language	3	0	3	0	

Second Semester (cont.)

Phar Chem 4	Pharmaceutical and Medicinal Organic Chemistry	3	1	3	3	Phar Chem 2, PHBS 1, PHBS 2*
Phar Chem 5	Pharmaceutical Analysis 2 (Instrumental Methods of Analysis)	2	1	2	3	Phar Chem 2, Phar Chem 3, Phar 4
PHBS 2	Pharmacognosy and Plant Chemistry	3	2	3	0	PharBot, Phar Chem 2
PHBS 3A	Pharmacology 1	4	0	4	6	PhyPath, PhMcrPrs, PHBS 1
Ph Info	Pharmacy Informatics	4	0	4	0	Phar 3
PE 4	Team Sports and Games	2	0	2	0	PE 3
TOTAL		22	4	22	15	

Term Break

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
GEC-ETH-ICS	Ethics	3	0	3	0	
Phar Care 4	Dispensing II (medication related problems, medication safety, medication counseling, and other pharmacy services)	2	2	2	6	Phar 3, Phar Care 2
PHBS 4	Biopharmaceutics and Pharmacokinetics	3	0	3	0	Phar 4, PHBS 3A
TOTAL		8	2	8	6	

BACHELOR OF SCIENCE IN PHARMACY

THIRD YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
DDM 1	Clinical Pharmacy and Pharmacotherapeutics 1	4	0	4	0	Drug Discovery and Development
GEC-ART	Foreign Language	3	0	3	0	
GEC-RPH	Pharmaceutical and Medicinal Organic Chemistry	3	0	3	0	
Phar 5	Pharmaceutical Analysis 2 (Instrumental Methods of Analysis)	2	1	2	3	Phar Care 4
PhManuf 1	Pharmacognosy and Plant Chemistry	2	2	2	6	Phar 4
PhManuf 2	Drug Discovery and Development	2	0	2	0	Phar 4
PHBS 3B	Pharmacology 1	4	1	4	3	PHBS 3A, PHBS 4
RTW 1	Pharmacy Informatics	3	0	3	0	PHBS 4, Phar 4, PHBS 2
TOTAL		23	4	23	12	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
GEC-TCW	The Contemporary World	3	0	3	0	
PHBS 5	Pharmaceutical Toxicology	2	1	2	3	PHBS 3B
DDM 2	Clinical Pharmacy and Pharmacotherapeutics 2	4	0	4	0	DDM 1
PhManuf 3	Cosmetic Product Development (Cosmetic Product Development, Regulation and Safety Assessment)	2	1	2	3	PhManuf 1, RTW 1
RTW 2	Pharmacy Research and Thesis Writing	1	2	1	6	RTW 1
PhManuf 4	Health Technology Assessment and Health Policy (with Pharmacoeconomics)	2	0	2	0	PhManuf 2

Second Semester (cont.)

Phar Ad 2	Pharmaceutical Marketing and Entrepreneurship	2	0	2	0	Phar Ad 1
GEC-STC	Science, Technology, and Society	3	0	3	0	
TOTAL		19	4	19	12	

Term Break

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Phar 7	Legal Pharmacy and Ethics	3	0	3	0	Phar 5
Phar Care 5	Community Pharmacy Services and Patient Interactions	2	0	2	0	DDM 1
SAP	Social and Administrative Pharmacy	1	0	1	0	PhManuf 4
Phar 6	Public Health Pharmacy (with Pharmacoepidemiology)	3	0	3	0	PhMcrPrs, DDM 2
TOTAL		9	0	9	0	

FOURTH YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Phar Prac 1	Supervised Pharmacy Practice Experience (Institutional) – 120 Hours	2.4				Phar 7, Phar Care 4, 4th Year Standing
Phar Prac 2	Supervised Pharmacy Practice Experience (Public Health and Regulatory Pharmacy) – 180 Hours	3.6				Phar 6, SAP, PhManuf 4, 4th Year Standing

First Semester (cont.)

Phar Prac 3	Supervised Pharmacy Practice Experience (Community) – 300 Hours	6				Phar 3, Phar Care 4, PHBS 3B, 4thYear Standing
PAC 1	Pharmacy Assessment Course 1	9		9		DDM 2, PhManuf 3, Phar 5, 4th Year Standing
TOTAL		21				

Second Semester

Subject Code	Description	Units		Hours		Pre-Requi-site
		lec	lab	lec	lab	
Phar Prac 4	Supervised Pharmacy Practice Experience (Hospital) – 300 Hours	6				Phar 5, DDM 2, 4thYear Standing
Phar Prac 5	Supervised Pharmacy Practice Experience (Hospital) – 300 Hours	6				PhManuf 3, Phar Ad 1, Phar Ad 2, Ph Info, Phar 7, 4thYear Standing
PAC 2	Pharmacy Assessment Course 2	9		9		PAC 1
TOTAL		21				

BACHELOR OF SCIENCE IN PHYSICAL THERAPY
FIRST YEAR
First Semester

Subject Code	Description	Units		Hours		Pre-Requi-site
		lec	lab	lec	lab	
BCS 1	Being Skills Course 1	1.5	0	1.5	0	
GEC-UTS	Understanding the Self	3	0	3	0	
GEC-MATH	Mathematics in the Modern World	3	0	3	0	
GEC-PCOM	Purposive Communication	3	0	3	0	
PE 1	Physical Fitness and Gymnastics	2	0	2	0	
NSTP 1	National Service Training Program 1	3	0	3	0	
Ana 1	Gross and Organ System Anatomy	3	2	3	6	
PhyTher 1	Introduction to Physical Therapy	3	1	3	3	
TOTAL		21.5	3	21.5	9	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requi-site
		lec	lab	lec	lab	
BCS 2	Being Skills Course 2	1.5	0	1.5	0	BSC 1
GEC-RPH	Readings in Philippine History	3	0	3	0	
PE 2	Rhythmic Activities	2	0	2	0	PE 1
NSTP 2	National Service Training Program 2	3	0	3	0	NSTP 1
Physio	Physiology of the Human Body	5	0	5	0	Ana 1
Ana 2	Neuroanatomy	2	1	2	3	Ana 1
ORAD	Organization and Administration in PT	3	1	3	3	PhyTher 1, GEC-PCOM
TL	ITeaching and Learning	3	1	3	3	PhyTher 1, GECPCOM
TOTAL		21.5	3	21.5	9	

SECOND YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requirement
		lec	lab	lec	lab	
GEC-TCW	The Contemporary World	3	0	3	0	
Ana 3	Applied Anatomy and Kinesiology	3	1	3	3	Ana 1, Physio
Health Care	Community Development and Public Health for Mass Education	3	1	3	3	Ana 1, Ana 2, Physio, ORAD, TL
PhyTher 2	Principles of PT Evaluation	3	2	3	6	Ana 1, Ana 2, Physio, PhyTher 1
PhyTher 3	Physical Agents and Electrotherapy	3	2	3	6	Ana 1, Ana 2, Physio, PhyTher 1
HGD	Human Growth and Development	3	0	3	0	Ana 1, Ana 2, Physio
PE 3	Swimming	2	0	2	0	PE 2
TOTAL		20	6	20	18	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requirement
		lec	lab	lec	lab	
Entrep	Entrepreneurship	3	0	3	0	ORAD, Health Care
EPC	English Proficiency Course	3	0	3	0	GEC-PCOM
FL	Foreign Language	3	0	3	0	
Innov PT	Innovations in PT Service Delivery (Clinical and Non-clinical Systems)	2	1	2	3	ORAD, PhyTher 1, PhyTher 2, Health Care
PE 4	Team Sports and Games	2	0	2	0	PE 3
Res 1	Research Concepts and Evidence-Based Practice	3	0	3	0	GEC-PCOM, GECMATH, PhyTher 1, PhyTher 2

Second Semester (cont.)

PhyTher 4	Basic Therapeutic Exercises for Wellness and Health Promotion	3	2	3	6	Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2
PhyTher 5	Orthosis, Prosthesis and Assistive Devices	3	1	3	3	Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2
TOTAL		22	4	22	12	

Term Break

Subject Code	Description	Units		Hours		Pre-Requirement
		lec	lab	lec	lab	
CBR 1	Community-Based Rehabilitation 1	3	0	3	0	ORAD, PhyTher 1, Health Care
Ethics 1	Bioethics	3	0	3	0	GEC-UTS
Industrial Rehab	Industrial Rehabilitation	3	0	3	0	Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2
Psychia	Psychiatric Foundations in PT	3	0	3	0	Ana 1, Ana 2, Physio, HGD
TOTAL		12	0	12	0	

THIRD YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requirement
		lec	lab	lec	lab	
CBR 2	Community-Based Rehabilitation 2	0	2	0	6	CBR 1, Innov PT
Res 2	Research Proposal Writing	0	2	0	6	Res 1, Innov PT

First Semester (cont.)

Ethics 2	Professional Ethics	0	1	0	3	Ethics 1
Clin Ed 1	Orthopedic, Sports, Integumentary & Surgical Conditions	0	3	0	9	Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5, Industrial Rehab
Clin Ed 2	Geriatric & Rheumatic PT	0	2	0	6	Ana 1, Ana 2, Ana 3, Physio, HGD, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5
Clin Ed 3	Other Medical Conditions (Obstetrics, Oncology, Endocrine & Immunology)	0	2	0	6	Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5
GEC-STs	Science, Technology and Society	3	0	3	0	
	TOTAL	3	12	3	36	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Clin Ed 4	Neurologic PT	3	2	3	6	Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5

Second Semester (cont.)

Clin Ed 5	Pediatric PT	0	2	0	6	Ana 1, Ana 2, Ana 3, Physio, HGD, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5
Clin Ed 6	Cardiopulmonary PT	0	3	0	9	Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5
Res 3	Research Implementation and Dissemination	0	2	0	6	Res 1, Res 2
Health Info	Health Informatics and Social Media	2	1	2	3	PhyTher 1
GEC-ART	Art Appreciation	3	0	3	0	
Rizal	Life and Works of Rizal	3	0	3	0	
	TOTAL	11	10	11	30	

FOURTH YEAR
First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Internship 1	Clinical Internship	15	0	15	0	Level I-III
Res 4	Writing for Publication and Research Translation	0	2	0	6	Res 1, Res 2, Res 3
	TOTAL	15	2	15	6	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Internship 2	Clinical Internship	15	0	15	0	Internship 1
Compre inPT	Comprehensive Examination in PT	6	0	6	0	Level I-III
	TOTAL	21	0	21	0	

BACHELOR OF SCIENCE IN RADIOLOGIC TECHNOLOGY FIRST YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BCS 1	Being Skills Course 1	1.5	0	1.5	0	
GEC-UTS	Understanding the Self	3	0	3	0	
GEC-RPH	Reading in Philippine History	3	0	3	0	
GEC-MATH	Mathematics in the Modern World	3	0	3	0	
GEC-PCOM	Purposive Communication	3	0	3	0	
RT 100	Introduction to Radiologic Technology and Health Care	3	0	3	0	
RT 101	Medical Terminology	3	0	3	0	
NSTP 1	National Service Training Program 1	3	0	3	0	
PE 1	Physical Fitness and Gymnastics	2	0	2	0	
	TOTAL	24.5	0	24.5	0	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BCS 2	Being Skills Course 2	1.5	0	1.5	0	BSC 1

Second Semester (cont.)

GEC-ETHICS	Ethics	3	0	3	0	
GEC-TCW	The Contemporary World	3	0	3	0	
FL	Foreign Language	3	0	3	3	
Rizal	Life and Works of Rizal	3	0	3	0	
RT 102	Imaging Science and Informatics	3	0	3	0	RT 100
RT 103	Radiation Production and Characteristics	2	1	2	3	RT 100
NSTP 2	National Service Training Program 2	3	0	3	0	RT 100
PE 2	Rhythmic Activities	2	0	2	0	PE 1
	TOTAL	23.5	1	23.5	13	

SECOND YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Ana & Physio	Human Anatomy & Physiology	3	2	3	6	RT 101
GEC-ART	Art Appreciation	3	0	3	0	
GEC-STC	Science, Technology and Society	3	0	3	0	
RT 104	Principles of Imaging	2	1	2	3	RT 103
RT 105	Professional Ethics, Jurisprudence and Cultural Sensitivity	3	0	3	0	
RT 106	Patient Care and Management	2	1	2	3	Ana & Physio
PE 3	Individual- Dual Sports & Games	2	0	2	0	PE 2
	TOTAL	18	4	18	12	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Entrep	Entrepreneurship	3	0	3	0	RT 106
EPC	English Proficiency Course	3	0	3	0	GEC-PCOM

Second Semester (cont.)

RT 107	Radiobiology	3	0	3	0	RT 103, RT 104
RT 108	Pharmacology and Venipuncture	2	1	2	3	Ana & Physio
RT 109	Imaging Equipment and Maintenance	2	1	2	3	RT 104
RT 110	Film-Screen Image Acquisition, Processing and Image Analysis	2	1	2	3	RT 103
RT 111	Administration and Leadership	3	0	3	0	
RT 112	Computed and Digital Radiography	3	0	3	0	Ana & Physio
PE 4	Team Sports and Games	2	0	2	0	PE 3
	TOTAL	23	3	23	9	

THIRD YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
RT 113A	Radiographic Positioning and Radiologic Procedures 1	3	1	3	3	Ana & Physio
RT 114	Radiologic Contrast Examination	3	1	3	3	Ana & Physio
RT 115	Ultrasonography	3	0	3	0	Ana & Physio
RT 116	Radiation Protection	3	0	3	0	RT 107, RT 110
RT 117	Radiographic Anatomy & Physiology	3	0	3	0	Ana & Physio
RT 118	Quality Assurance and Quality Control	2	1	2	3	RT 103, RT 104
Research 1	Introduction to Medical Research	3	0	3	0	
	TOTAL	20	3	20	9	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
RT 113B	Radiographic Positioning and Radiologic Procedures 2	3	1	3	3	RT 113A
RT 119	Computed Tomography	3	0	3	0	Ana & Physio
RT 120	Magnetic Resonance Imaging	3	0	3	0	Ana & Physio
RT 121	Mammography	2	0	2	0	Ana & Physio
RT 122	Radiologic Pathology	3	0	3	0	RT 117, Ana & Physio
RT 123	Interventional Radiology	3	0	3	0	Ana & Physio
RT 124	Radiotherapy	3	0	3	0	Ana & Physio
RT 125	Nuclear Medicine	3	0	3	0	Ana & Physio
Research 2	RadTech Research Paper Writing & Presentation	1	2	1	6	Research 1
	TOTAL	24	3	24	9	

FOURTH YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Clin Ed 1	Clinical Education 1	18	0			Level I-III
Sem 1	Seminar 1	3	0	3	0	Level I-III
	TOTAL	21	0	3	0	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Clin Ed 2	Clinical Education 2	18	0			Clin Ed 1

Second Semester (cont.)

Sem 2	Seminar 2 with Radiologic Technology Assessment Program	0	3	0	9	Sem 1
TOTAL		18	3	0	9	

BACHELOR OF SCIENCE IN BIOLOGY Major in MEDICAL BIOLOGY
Effective Academic Year 2021-2022

FIRST YEAR**First Semester**

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
		lec	lab	lec	lab	
BIO 101	General Botany	3	2	3	6	
BIO 102	General Zoology	3	2	3	6	
BSC 1	Being Skills Course 1	1.5	0	1.5	0	
GEC-PCOM	Purposive Communication	3	0	3	0	
GEC-UTS	Understanding the Self	3	0	3	0	
GEC-MATH	Mathematics in the Modern World	3	0	3	0	
PE 1	Physical Fitness and Gymnastics	2	0	2	0	
NSTP 1	National Service Training Program 1	3	0	3	0	
TOTAL		21.5	4	21.5	12	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BIO 103	Systematic Biology	3	2	3	6	BIO 101, 102
BIO 104	Chemical Biology I (Organic Molecules)	2	2	2	6	BIO 101, 102
BIO 105	Statistical Biology	2	1	2	3	GEC-MATH

Second Semester (cont.)

BSC 2	Being Skills Course 2	1.5	0	1.5	0	BSC 1
FL	Foreign Language	3	0	3	0	
GEC-STC	Science, Technology and Society	3	0	3	0	
PE 2	Rhythmic Activities	2	0	2	0	
NSTP 2	National Service Training Program 2	3	0	3	0	
TOTAL		19.5	5	19.5	15	

Term Break

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BIO 106	General Ecology	3	2	3	6	BIO 103
BIO 107	Chemical Biology II (Analytical Methods for Biology)	2	2	2	6	BIO 104
GEC-ART	Art Appreciation	3	0	3	0	
TOTAL		8	4	8	12	

SECOND YEAR**First Semester**

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
Ana & Phy	Human Anatomy and Physiology with Pathophysiology	3	2	3	6	BIO 102
BIO 201	Chemical Biology III (Biomolecules)	3	2	3	6	BIO 107
BIO 202	Evolutionary Biology	3	2	3	6	BIO 103
GEC-ETHICS	Ethics	3	0	3	0	
GEC-RPH	Readings in Philippine History	3	0	3	0	
PE 3	Individual- Dual Sports & Games	2	0	2	0	
Rizal	Life and Works of Rizal	3	0	3	0	
TOTAL		20	6	20	18	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BIO 203	Genetics	3	2	3	6	BIO 103
BIO 204	General Physiology	3	2	3	6	Ana & Phy
BIO 205	Biophysics	2	2	2	6	Ana & Phy
BIO 206	Microbiology	3	2	3	6	BIO 201
Entrep	Entrepreneurship	3	0	3	0	
EPC	English Proficiency Course	3	0	3	0	GEC-PCOM
PE 4	Team Sports and Games	2	0	2	0	
TOTAL		19	8	19	24	

Term Break

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BIO 207	Introduction to Research in the Life Sciences	3	0	3	0	Level I-II
BIO 208	Epidemiology and Public Health	3	2	3	6	Ana & Phy
GEC-TCW	The Contemporary World	3	0	3	0	
TOTAL		9	2	9	6	

THIRD YEAR

First Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BIO 301	Cell and Molecular Biology	3	2	3	6	BIO 203
BIO 302	Bioinformatics	2	1	2	3	BIO 208
BIO 303	Developmental Biology	3	2	3	6	BIO 204
BIO 304	General and Clinical Pathology 1	3	2	3	6	BIO 204
BIO 305	Research Implementation in the Life Sciences	2	3	2	9	BIO 207
TOTAL		13	10	13	30	

Second Semester

Subject Code	Description	Units		Hours		Pre-Requisite
		lec	lab	lec	lab	
BIO 306	General and Clinical Pathology 2	3	2	3	6	BIO 304
BIO 307	Clinical Pharmacology	3	2	3	6	BIO 304
BIO 308	Research Dissemination and Publication	2	1	2	3	BIO 305
BIO 309	Genomics and Proteomics	3	2	3	6	BIO 301
BIO 310	Biology Practicum	0	3	0	9	Level I-III
TOTAL		11	10	11	30	

COURSE DESCRIPTION

DIPLOMA IN PHLEBOTOMY PROGRAM LEADING TO BS MEDICAL LABORATORY SCIENCE

FIRST SEMESTER

FIRST YEAR

Course Code: Ana & Physio

Course Description: Human Anatomy and Physiology with Pathophysiology

Course Credit : 3 units lec/ 2 units lab

Prerequisite : None

Course Description

This course is designed to provide allied medical students with anatomical terminologies and concepts on basic human anatomy and physiology, which explain the physical and chemical basis of the origin, development and progression of life and normal adaptive responses to changes in the external and internal environment in the maintenance of homeostasis in the normal human being.

Course Code: BSC 1

Course Description: Being Skills Course 1

Course Credit: 1.5 units lecture

Prerequisite: None

Course Description

The course is designed to equip students with self-awareness tools that will provide the groundwork for emotional literacy, productivity, and resilience.

Course Code: Chem 1

Course Description: Inorganic and Organic Chemistry
Course Credit: 3 units lec/ 2 units lab
Prerequisite: None

Course Description

The course includes basic concepts of atomic structure and its relationship to properties of matter, chemical equilibrium, ionization, oxidation-reduction relationship, elements and some important compounds. Organic chemistry provides students with an introduction to chemical reactivity, chemical bonding and organic structure. It deals with the fundamental concepts of organic chemistry: structures, properties and chemical behavior of organic compounds. The system of nomenclature of organic compounds is also dealt with.

Course Code: GEC-MATH
Course Description: Mathematics in the Modern World
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with the nature of mathematics, appreciation of its practical, intellectual, and aesthetic dimensions, and application of mathematical tools in daily life.

Course Code: GEC-UTS
Course Description: Understanding the Self
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with the nature of identity; factors and forces that affect the development and maintenance of personal identity.

Course Code: NSTP 1
Course Description: National Service Training Program 1
Course Credit: 3 units
Prerequisite: None

Course Description

This course is pursuant to Section 12 of RA 9163 otherwise known as the National Training Service Program (NSTP) Act of 2001. The Civic Welfare Training Service (CWTS) is a component of NSTP. It is a course for first year students both males and females designed to help the, understand, appreciate and eventually live by the basic concepts of the Student's Transformation and Enrichment for Truth (STET) with the end in view of empowering them into becoming a potent resource for community development. It includes the following concepts: volunteerism, self-awareness and team building.

Course Code: PE 1
Course Description: Physical Fitness and Gymnastics
Course Credit: 2 units
Prerequisite: None

Course Description

This course gives light to the concepts and objectives of Physical Education and Physical Fitness. This is intended to uplift wellness among the lives of the learners through application of the topics discussed and activities presented. In focus are physical fitness and gymnastics which invigorate development in the three domains of learning.

Course Code: PRIN 1
Course Description: Principles of Medical Laboratory Science Practice 1
Course Credit: 3 units lec
Prerequisite: None

Course Description

This course deals with the basic concepts and principles related to the Medical Technology/ Medical Laboratory Science profession. Its emphasis is on the curriculum, practice of the profession, clinical laboratories, continuing professional education, biosafety practices and waste management.

SECOND SEMESTER

Course Code: BSC 2
Course Description: Being Skills Course 2
Course Credit: 1.5 units lecture
Prerequisite: BSC 1

Course Description

After the foundation has been set, the course will enable students to practice habits that contribute to healthy collaboration with peers.

Course Code: Chem 2
Course Description: Analytical Chemistry (Qualitative and Quantitative)
Course Credit: 3 units lec/ 2 units lab
Prerequisite: Chem 1

Course Description

The theory of qualitative analysis is continued study of the fundamentals of general chemistry. But whereas, general chemistry is a broad survey of the behavior of all types of substance under varying conditions. Qualitative analysis is primarily concerned with solutions of electrolytes. It presents an integrated discussion of the concepts, theories and laws relating to solution. Special emphasis is laid upon the properties of electrolytes, and whatever possible, there is an attempt to correlate the theoretical discussions with the laboratory procedures of qualitative analysis. With respect to ionic solutions, the theory of qualitative analysis partially bridges the gap between general chemistry and physical chemistry. Quantitative analysis deals with the methods of determining the quantities of one or more constituents presents in a given sample of specimen. The analytical results are reported as % by mass but there are methods of determining these constituents, all based on chemical or physical properties of atom, molecules and ions.

Course Code: GEC-PCOM
Course Description: Purposive Communication
Course Credit: 3 units lecture

Prerequisite: None

Course Description

This course involves writing, speaking and presenting to different audiences and for various purposes.

Course Code: MLS 101

Course Description: Health Information System for Medical Laboratory Science

Course Credit: 2 units lec/ 1 unit lab

Prerequisite: Prin 1

Course Description

This course introduces the core concepts of health information system domains namely the hospital information system (HIS), laboratory information system (LIS) and material management information system (MMIS) as applied in the practice of medical laboratory science.

Course Code: NSTP 2

Course Description: National Service Training Program 2

Course Credit: 3 units

Prerequisite: None

Course Description

This course is designed to encourage the youth to continue the improvement of the general welfare and the quality of life of Filipinos. This course requires the students to carry out projects and activities in their assigned community, barangay/s, government and non-government agencies. Students are required to submit documented report particularly those social activities contributory to the general welfare and betterment of life for the members of the community or the enhancement of its facilities, especially those devoted to improving health, education, safety, livelihood, entrepreneurship, morals of the citizenry and other social welfare services.

Course Code: PE 2

Course Description: Rhythmic Activities

Course Credit: 2 units

Prerequisite: None

Course Description

This course seeks to study both the theoretical and practical aspects of dancing to develop the inborn sense of rhythm. The emphasis of this course is on learning on the fundamentals of the Philippine Folk Dances, Ballroom dances and other types of dances.

Course Code: Phleb 101

Course Description: Laboratory Assisting Principles and Procedures with Medical Terminology

Course Credit: 3 units lec

Prerequisite: None

Course Description

This course introduces concepts and principles and procedures of laboratory assisting as well as lectures on terminologies as applied to the practice of the health professions.

Course Code: Prin 2

Course Description: Principles of Medical Laboratory Science Practice 2

Course Credit: 3 units lec/ 1 unit lab

Prerequisite: Prin 1

Course Description

Clinical Laboratory Assistance encompasses the concepts and principles of the different assays performed in the clinical laboratory. Phlebotomy deals with the basic concepts, principles, and application of the standard procedures in blood collection, transport, and processing. It also involves the study of pre-analytic, analytic and post-analytic variables that affect reliability of test results.

TERM BREAK

Course Code: GEC-ETHICS

Course Description: Ethics

Course Credit: 3 units lecture

Prerequisite: None

Course Description

This course deals with the principles of ethical behavior in modern society at the level of the person, society and in interaction with the environment and other shared resources.

Course Code: MLS 102

Course Description: Cytogenetics

Course Credit: 3 units lec

Prerequisite: Ana and Physio

Course Description

The course deals with the study of the concepts related to the study of heredity and inheritance: genetic phenomena, sex determinations, defects in relation to human inheritance. Nucleic acids (DNA and RNA) and their application to medical science are given emphasis. Discussion on the basics of molecular biology as it pertains to clinical medicine is also provided in the course.

Course Code : MLS 103

Course Description: Principles and Strategies of Teaching in Med Lab Science

Course Credit: 3 units lec

Prerequisite: Prin 1

Course Description

The course deals with the principles and teaching/learning strategies in health education including adult learning, the roles of a teacher/medical technologist in different settings. It also includes strategies that enhance critical thinking, clinical laboratory teaching, assessing and evaluating learning.

SECOND YEAR FIRST SEMESTER

Course Code: Biostat
Course Description: Biostatistics & Epidemiology
Course Credit: 2 units lec/ 1 unit lab
Prerequisite: Math 1

Course Description

This course introduces statistical concepts and analytical methods as applied to data encountered in biotechnology and biomedical sciences. It emphasizes the basic concepts of experimental design, quantitative analysis of data and statistical inferences. Topics include probability theory and distributions; population parameters and their sample estimates; descriptive statistics for central tendency and dispersion; hypothesis testing and confidence intervals for means, variances and proportions; the chi-square statistic; categorical data analysis; linear correlation and regression model; analysis of variance; and non-parametric methods. The course provides the students a foundation to evaluate information critically to support research objectives and product claims and a better understanding of statistical design of experimental trials for biological products/devices. Included in the discussion is a hands-on application of computer programs for statistical analysis. The course also provides an understanding on the spread and control of common diseases affecting human being.

Course Code: Chem 3
Course Description: Biochemistry for Med Lab Science
Course Credit: 3 units lec/ 2 units lab
Prerequisite: Chem 2

Course Description

This course has been designed to fulfill curricular needs of students taking up medical- related and non-medical courses. As a natural science, biochemical principles influence metabolic and developmental biological processes. This course explores the basic principles of biochemistry in relation to the appreciation and understanding of biological networks. Topics discussed include the structure, classification, functions and metabolism of biologically important compounds; protein, carbohydrate, lipid and nucleic acid. There is also integration of biochemistry concepts to vitamins, enzymes, blood, urine, feces and sweat wherein medical aspects are stressed. The course also includes laboratory activities to develop the required competencies by combining theoretical knowledge and practical skills.

Course Code: EPC
Course Description: English Proficiency
Course Credit: 3 units lecture
Prerequisite: GEC-PCOM

Course Description

This enhancement program provides students an excellent opportunity to improve their English proficiency and to help them increase their abilities in the four language skills: speaking, listening, reading and writing. This makes use of interactive communicative activities that will help the students learn independently through their participation in self- access learning activities appropriate to their level and developmental needs using Tell Me More or other related software and

learning platforms.

Course Code: GEC-ART
Course Description: Art Appreciation
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with nature, function and appreciation of the arts to contemporary society.

Course Code: GEC-RPH
Course Description: Readings in Philippine History
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with Philippine History viewed from the lens of selected primary sources in different periods, analysis and interpretation.

Course Code: Health Care
Course Description: Community and Public Health for Medical Laboratory Science
Course Credit: 2 units lec/ 2 units (RLE)
Prerequisite: Ana & Physio

Course Description

This course deals with the study of the foundations of community health that includes human ecology, demography and epidemiology. It emphasizes the promotion of community of public health and environmental health production.

Course Code: PE 3
Course Description: Individual-Dual Sports & Games
Course Credit: 2 units
Prerequisite: None

Course Description

This course is about the theories, demonstrations and practical works of the games in athletics, badminton, bowling, and table tennis with emphasis on the development of appreciation and skills in playing.

Course Code: Phleb 102
Course Description: Principles of Phlebotomy and Clinical Specimen Processing
Course Credit: 2 units lec/ 1 unit lab
Prerequisite: Phleb 101, Prin 1

Course Description

The course includes the theoretical and practical applications of phlebotomy which includes capillary puncture, venipuncture, and blood donor phlebotomy. Student will also be oriented in the processing of specimens used in the laboratory diagnosis of

medical diseases and conditions. Pre-analytical and post-analytical variables that can affect laboratory results are likewise to be discussed.

SECOND SEMESTER

Course Code: Entrep
Course Description: Entrepreneurship
Course Credit: 3 units lecture
Prerequisite: Phleb 102

Course Description

The course aim to teach the approach entrepreneurs use to identify opportunity and create new ventures, the analytical skills that are needed to practice this approach and the background knowledge and managerial skills that are necessary in dealing with the recurring issues involved in starting, growing and harnessing the value of new ventures.

Course Code: FL
Course Description: Foreign Language
Course Credit: 3 units lecture
Prerequisite: None

Course Description

It is designed to develop the knowledge, understanding, and skills involved in learning the secondary language. The course covers the development of the four fundamental skills in foreign language learning: listening, reading, speaking and writing with an emphasis on oral skills. Cultural readings and videos are included in each lesson to supplement the basic text and provide cultural insights and information.

Course Code: MLS 201
Course Description: Laboratory Management
Course Credit: 2 units lec
Prerequisite: Phleb 102

Course Description

This course emphasizes the basic principles of clinical laboratory supervision and management including performance management, coaching and counseling, TQM, laboratory inspections and accreditation, interpersonal and team skills, fiscal management skills (budgets and cost containment), and method & instrument evaluation. Additional instruction is provided on choosing and maintaining laboratory information systems, quality systems and safety.

Course Code: MLS 202
Course Description: Human Histology
Course Credit: 2 units lec/ 1 unit lab
Prerequisite: Ana & Physio

Course Description

This course is a study of tissues and cells that make up the human body. Emphasis is given on the characteristics of cells and tissues from the point of view of structure, component, functions and distribution.

Course Code: GEC-STC
Course Description: Science, Technology and Society
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course includes interactions between science and technology and social, cultural, political and economic contexts which shape and are shaped by them; specific examples throughout human history of scientific and technological developments.

Course Code: PE 4
Course Description: Team Sports and Games
Course Credit: 2 units
Prerequisite: None

Course Description

This course is designed to guide the students to develop the fundamentals of team sports, the different skills in volleyball and basketball. It includes an adequate knowledge of the background, interpretation and application of the rules of the games.

Course Code: Phleb 103
Course Description: Phlebotomy Clinical Practicum 1
Course Credit: 3 units lab
Prerequisite: None

Course Description

The course involves the hands-on clinical application of phlebotomy which includes capillary puncture, venipuncture and blood donor phlebotomy. Students will undergo approximately 162 hours of clinical practicum in school-based and clinical-based setting.

Course Code: Rizal
Course Description: Life and Works of Rizal
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with nationalism in the Philippines and the historical circumstances that led to its birth. It highlights the role played by Rizal and other national heroes in its development as movement. Included are the study of pre-Spanish period, Filipino culture, the Hispanization of the Filipinos and the resistance to it, the Propaganda movement of the subsequent Philippine Revolution as inspired by the intellectual legacies of Rizal and other patriots.

TERM BREAK

Course Code: GEC-TCW
Course Description: The Contemporary World
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with globalization and its impact on individuals, communities and nations, challenges and responses.

Course Code: MLS 203

Course Description: Medical Technology Laws and Bioethics

Course Credit: 3 units lec

Prerequisite: Prin 1, Ethics

Course Description

The course deals with various laws related to the Medical Technology/Medical Laboratory Science profession in the Philippines with emphasis on the Philippine Medical Technology Act of 1969 (RA 5527). It also includes the study of the history of Philippine Association of Medical Technologists Inc. (PAMET), Philippine Association of Schools of Medical Technology and Public Health (PASMETH), Philippine Laws, Presidential Decrees in relation to the practice of Medical Technology, and Code of Ethics of Medical Technologists.

Course Code: Phleb 104

Course Description: Phlebotomy Clinical Practicum 2

Course Credit: 3 units lab

Prerequisite: Phleb 103

Course Description

The course is continuation of Phlebotomy Clinical Practicum 3 and involves the hands-on clinical application of phlebotomy which includes capillary puncture, venipuncture and blood donor phlebotomy. Students will undergo approximately 162 hours of clinical practicum in school-based and clinical-based settings.

THIRD YEAR**FIRST SEMESTER**

Course Code: MLS 301

Course Description: Clinical Chemistry 1 Course Credit: 3 units lec/ 2 units lab

Prerequisite: Diploma in Phlebotomy

Course Description

The course deals with the quantitative measurement of biochemical substances found in body fluids essentially blood. This involves the knowledge and understanding of the basic concepts and principles of their metabolism, laboratory analyses, and pathophysiology. Quality assurance and safety are given due emphasis.

Course Code : MLS 302 Course Description: Hematology 1

Course Credit: 3 units lec/ 1 unit lab

Prerequisite: Diploma in Phlebotomy

Course Description

The course deals with the study of fundamentals of blood as a tissue. It includes blood cell maturation sequences as well as the theories and practical application of routine hematology principles.

Course Code: MLS 303

Course Description: Analysis of Urine and Other Body Fluids

Course Credit: 3 units lec/ 1 unit lab

Prerequisite: Diploma in Phlebotomy

Course Description

The course deals with the study of the gross, chemical and microscopic analyses of the different body fluids other than blood. It includes the importance of these body fluids to body processes; the principles of the analytical procedures; interpretation of results and clinical significance of the physiologically important substances found in these body fluids. Quality Assurance and Laboratory Safety protocols are also given emphasis.

Course Code: MLS 304

Course Description: Clinical Bacteriology Course Credit: 3 units lec/ 2 units lab

Prerequisite: Diploma in Phlebotomy

Course Description

The course covers the morphology and physiology of bacteria, Rickettsia and other significant atypical bacteria, and their role in infection and immunity. Emphasis is made on their isolation and identification and susceptibility testing as an aid in laboratory diagnosis.

Course Code: MLS 305

Course Description: Histopathologic & Cytologic Techniques

Course Credit: 2 units lec/ 1 unit lab

Prerequisite: Diploma in Phlebotomy

Course Description

This curriculum is designed specifically for Allied Medical students which is divided into three. The first part deals with the study of human disease processes, correlating the alteration of normal structure and function with the pathologic changes. The second part deals with the Histologic and Cytologic techniques which are requisite for the demonstration of pathologic alterations at the cellular level. The third component will address the basic concepts and application of the current Histologic and Cytopathologic technique advancement.

Course Code: MLS 306

Course Description: Clinical Parasitology

Course Credit: 3 units lec/ 1 unit lab

Prerequisite: Diploma in Phlebotomy

Course Description

This course is a study of animal parasites which are of medical importance to man especially those commonly found in the Philippines. Emphasis is given on the characteristics of parasites from the point of view of morphology, epidemiology, pathogenicity, laboratory diagnosis of specific disease, distribution and life cycles as well as preventive measures against infection.

Course Code: MLS 307

Course Description: Introduction to Medical Laboratory Science Research Course

Credit: 1 unit lec/ 1 unit lab

Prerequisite: Diploma in Phlebotomy

Course Description

The course deals with the study of the general concepts of the medical research process. It also include the study of the rudiments in the preparation of research including problem identification, literature search, limitations and scope of the study, statistical analysis, budget preparation and Gantt chart preparation.

SECOND SEMESTER

Course Code: MLS 308
Course Description: Clinical Chemistry 2
Course Credit: 3 units lec/ 2 units lab
Prerequisite: MLS 301

Course Description

The course is a continuation of Clinical Chemistry 1. The course includes Tumor Markers, Endocrinology, Toxicology and Drug Testing. Tumor markers are substances produced by tumor cells or by other cells of the body in response to cancer or certain benign (noncancerous) conditions. Endocrinology deals with the study of the products of a group of structurally and functionally specialized glands and their action in maintaining the chemical integrity of cell environment. Toxicology involves the study of substances introduced exogenously into the body. It is apportioned into the areas of detection of drugs of abuse, environmental carcinogens, toxins or poisons and monitoring therapeutic levels. The course includes a focus into the establishment of drug testing centers including the legal and technical mandates required in the local setting. Quality assurance and safety are given due emphasis.

Course Code: MLS 309
Course Description: Hematology 2
Course Credit: 2 unit lec/ 1 unit lab
Prerequisite: MLS 302

Course Description

This course deals with the study of fundamentals of blood as a tissue, the pathophysiology and the mechanism of coagulation and hemostasis, with emphasis on laboratory diagnostic procedures.

Course Code: MLS 310
Course Description: Immunology & Serology
Course Credit: 3 units lec/ 1 unit lab
Prerequisite: Diploma in Phlebotomy

Course Description

The course deals with the basic concepts of immunology and principles of serological procedures, interpretation of results and their clinical significance.

Course Code: MLS 311
Course Description: Immunohematology and Transfusion Medicine
Course Credit: 3 units lec/ 1 unit lab
Prerequisite: Diploma in Phlebotomy

Course Description

This course deals with the study of immunologic principles applied in blood group specific antigens and antibodies. It also deals with mechanisms of blood typing and crossmatching, antihuman globulin testing, detection and identification of antibodies, screening of donors for blood donation, bleeding techniques, preparation of blood components and blood products, their storage and disposal with emphasis on quality systems.

Course Code: MLS 312
Course Description: Molecular Biology and Diagnostics
Course Credit: 1 unit lec/ 2 units lab
Prerequisite: Diploma in Phlebotomy

Course Description

This course acquaints the medical technology student with basic concepts of molecular biology and diagnostics. It covers the molecular basis of biological activities of biomolecules in various systems of a cell including interaction between DNA, RNA, and protein. It also includes the different molecular techniques such as DNA and RNA isolation, gel electrophoresis, hybridization, and amplification, microarrays, DNA sequencing, protein analytic techniques, which are used in the diagnosis of infectious and non-infectious diseases, in forensics, and in genetic testing. Bioinformatics and other clinical applications of these techniques will also be covered.

Course Code: MLS 313
Course Description: Mycology and Virology
Course Credit: 2 units lec
Prerequisite: MLS 304

Course Description

This course deals with the study of morphologic and biologic characteristics of fungal and viral agents of diseases. It also includes the study of laboratory diagnostic methods, epidemiology, pathology, prevention and control of diseases caused by fungi and viruses.

Course Code: MLS 314
Course Description: Med Lab Science Research Paper Writing & Presentation
Course Credit: 1 unit lec/ 2 units lab
Prerequisite: MLS 307

Course Description

This course deals with the completion of the research process started in Research 1. Emphasis is on the presentation, analysis and interpretation of data and summary of findings and recommendations in a publishable format.

FOURTH YEAR FIRST SEMESTER

Course Code: MLS 401
Course Description: Clinical Internship 1
Course Credit: 12 units
Prerequisite: Level I-III

Course Description

The Medical Laboratory Science Internship Training Program is in the fourth year level of Bachelor of Science in Medical Laboratory Science program. It is an intensive 6-months practical and theoretical training in the different sections of the Clinical Laboratory namely, Clinical Chemistry, Hematology, Immunohematology & Transfusion Medicine, Immunology, Serology, Microbiology, Urinalysis and other body fluids (Clinical Microscopy), Parasitology, Histopathologic & Cytologic Techniques and other related fields. It also emphasizes the development of a proper value system.

Course Code: MLS 402
Course Description: Seminar 1
Course Credit: 1 unit lecture
Prerequisite: Level I-III

Course Description

Seminar 1 deals with the special topics which will incorporate procedures, techniques and laboratory examinations that will aid in the diagnosis and analyses of pathologic conditions.

Course Code : MTAP 1
Course Description : Medical Technology Assessment Program 1
Course Credit : 3 units RLE
Prerequisite : Level I-III

Course Description

This course integrates and correlates all the knowledge acquired by the students in the professional courses and internship training through case presentation, analysis and reporting.

SECOND SEMESTER

FIRST SEMESTER

Course Code: AnaPhy
Course Description : Clinical Internship 2
Course Credit : 12 units laboratory
Prerequisite : MLS 401

Course Description

The Medical Laboratory Science Internship Training Program 2 is the continuation of the clinical internship 1. It is another 6-months practical and theoretical training in the different sections of the Clinical Laboratory namely, Clinical Chemistry, Hematology, Immunohematology & Transfusion Medicine, Immunology, Serology, Microbiology, Urinalysis and other body fluids (Clinical Microscopy), Parasitology, Histopathologic & Cytologic Techniques and other related fields. It also emphasizes the development of a proper value system.

Course Code : MLS 404
Course Description : Seminar 2
Course Credit : 1 unit lecture
Prerequisite : MLS 402

Course Description

Seminar 2 is a continuation of Seminar 1 where integration and correlation of the

knowledge acquired by the students in the professional subjects and in the course of their internship is further enhanced. This deals with the special topics which will incorporate procedures, techniques, laboratory examinations and clinical cases that will aid in the diagnosis and analyses of pathologic conditions.

Course Code : MTAP 2
Course Description : Medical Technology Assessment Program 2
Course Credit : 3 units RLE
Prerequisite : MTAP 1

Course Description

The Medical Technology Assessment Course 2 is an integrated, intensive and comprehensive review of the different disciplines of the profession namely Clinical Chemistry, Hematology, Immunohematology (Blood Banking), Immunology, Serology, Microbiology, Urinalysis and Other Body Fluids (Clinical Microscopy), Parasitology, Histopathology/Cytology and other emergent disciplines. The course is designed to prepare students in the licensure examination for medical technologists. Student should pass the Comprehensive examination at the end of the semester to qualify for graduation.

DIPLOMA IN PHARMACY ASSISTING LEADING TO BS PHARMACY

FIRST YEAR

Course Description: Human Anatomy and Physiology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: None

Course Description

This course is focused on human anatomy and physiology and includes discussion on the definitions of anatomical terms and basic physiologic processes, description of the anatomical and functional correlates in living things which explain the physical and chemical basis of the origin, development, and progression of life and a description of the normal responses to alterations in both internal and external environmental changes to achieve homeostasis.

Course Code: BSC 1
Course Description: Being Skills Course 1
Course Credit: 1.5 units lecture
Prerequisite: None

Course Description

The course is designed to equip students with self-awareness tools that will provide the groundwork for emotional literacy, productivity, and resilience.

Course Code: GEC-PCOM
Course Description: Purposive Communication

Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course involves writing, speaking and presenting to different audiences and for various purposes.

Course Code: GEC-UTS
Course Description: Understanding the Self
Course Credit: 3 units lecture
Pre-requisite: None

Course Description

This course deals with the nature of identity; factors and forces that affect the development and maintenance of personal identity.

Course Code: Phar 1
Course Description: Perspectives in Pharmacy
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course orients the student in the history and development of pharmacy and the standards of its practice. This also orients the student in the different specializations and fields of pharmacy practice.

Course Code: Phar Chem 1
Course Description: Pharmaceutical Inorganic Chemistry (with Qualitative Analysis)
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: None

Course Description

This course covers the chemistry and pharmacy of inorganic medicinals with emphasis on those official in the USP and NF, their preparations, properties, tests and uses. It includes concepts and chemical reactions related to qualitative analysis of inorganic compounds.

Course Code: NSTP 1
Course Description: National Service Training Program
Course Credit: 3 units
Prerequisite: None

Course Description

The course is in pursuant to Section 12 of RA 913. Otherwise known as the National Training Service Program (NSTP) Act of 2001. The Civic Welfare Training Service (CWTS) is a component of the (NSTP). It is a course for the first-year students both males and females designed to help them understand, appreciate and eventually live by the basic concepts of the Student's Transformation and Enrichment for Truth (STET) with the end in view of empowering them into becoming a potent resource for community development. It includes the following concepts: volunteerism,

self-awareness and team building.

Course Code: PE 1
Course Description: Physical Fitness and Gymnastics
Course Credit: 2 units
Prerequisite: None

Course Description

This course deals with the study of the meaning of physical education and its objectives, the study of fundamental movements and the study of physical fitness and how one can make it beneficial throughout life.

SECOND SEMESTER

Course Code: BSC 2
Course Description: Being Skills Course 2
Course Credit: 1.5 units lecture
Prerequisite: BSC 1

Course Description

After the foundation has been set, the course will enable students to practice habits that contribute to healthy collaboration with peers.

Course Code: Phar 2
Course Description: Pharmaceutical Calculations and Techniques
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: Phar 1

Course Description

This course develops the mathematic skills and knowledge required in various pharmacy practice settings. Students will be introduced to the Apothecary and Avoirdupois systems of measurement and will perform interconversions between these measurement systems and the metric system. Problem solving skills will be developed as students become proficient in basic math skills used to solve pharmacy calculations-based word problems which are commonly seen in a variety of practice settings, including community, compounding, hospital, and nuclear pharmacy.

Course Code: PharBot
Course Description: Pharmaceutical Botany with Taxonomy
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: None

Course Description

This course is an extensive presentation of plant life and related living forms, inclusive of morphology and hierarchal organization and its value as an integral part of the ecosystem and the pharmaceutical field.

Course Code: Phar Chem 2
Course Description: Pharmaceutical Organic Chemistry
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: Phar Chem 1

Course Description

This course is a continuation of Phar Chem 1 which emphasizes on the study of structure, physicochemical properties in relation to biological activities, preparation and/or synthesis, uses and doses of organic compounds.

Course Code: Phar Chem 3

Course Description: Pharmaceutical Analysis 1 (Quantitative Pharmaceutical Chemistry)

Course Credit: 3 units lec, 1 units laboratory

Prerequisite: Phar Chem 1

Course Description

This course deals with the important theories, principles, techniques and applications of various quantitative and pharmaceutical analyses, as applied in the quality control of raw materials and drug products.

Course Code: PhyPath

Course Description: Human Physiology and Pathology

Course Credit: 3 units lecture, 1 unit laboratory

Prerequisite: AnaPhy

Course Description

This course focuses on the normal and abnormal functions of various organ systems of the human body. The topics will cover normal physiology and the various pathological conditions of organ systems in relation to their treatment.

Course Code: NSTP 2

Course Description: National Service Training Program 2

Course Credit: 3 units

Prerequisite: NSTP 1

Course Description

The Civic Welfare Training Service Program (CWTS) 2 is a sequel to CWTS 1. It is designed to immerse students in activities that will arm them with the capability to contribute to the upliftment of the general welfare and the quality of life for the members of the community and the enhancement of its facilities especially those that are devoted to improving the health, environment, entrepreneurship, safety, recreation and morals of the citizens.

Course Code: PE 2

Course Description: Rhythmic Activities

Course Credit: 2 units

Prerequisite: PE 1

Course Description

This course seeks to study both the theoretical and practical aspect of dancing to develop the inborn sense of rhythm. The emphasis of this course is on learning the fundamentals of the Philippine Folk Dances, Ballroom Dances and other types of dances.

TERM BREAK

Course Code: Phar Care 1

Course Description: Introduction to Health Care Systems

Course Credit: 2 units lecture

Prerequisite: Phar 1

Course Description

This course deals with the holistic approach in the promotion of health. It includes discussion on the human life cycle, health problem identification, health care strategies, essential health intervention, and health sectors that support health related-issues and policies.

Course Code: Phar Ad 1

Course Description: Introduction to Pharmacy Administration, Management, and Leadership

Course Credit: 2 units lecture

Prerequisite: Phar 1

Course Description

This is an introductory course designed to teach the concepts, principles and fundamentals of pharmaceutical administration and management. This includes the basic functions of planning, organizing, staffing, directing and controlling as they relate to fiscal, personnel and merchandizing management. This course is also intended to provide the students with the tools and skills necessary to effectively manage themselves and to participate fully in their organizations in a changing world environment.

Course Code: Phar Care 2

Course Description: Dispensing I (Dispensing Process, Reading & Interpreting the Prescription and Other Medicine Orders)

Course Credit: 1 units lecture, 1 unit laboratory

Prerequisite: Phar 2

Course Description

This course deals with the basic concepts of dispensing, dispensing techniques and the ethical policies that govern this important facet of professional practice of pharmacy. It also deals with the study of theoretical perspectives and contemporary issues relevant to social and behavioral aspects concerning therapeutic medication counseling.

SECOND YEAR

FIRST SEMESTER

Course Code: Phar 3

Course Description: Pharmaceutical Dosage Forms, Drug Delivery Systems and Medical Devices

Course Credit: 2 units lecture, 2 units laboratory

Prerequisite: Phar 2

Course Description

This course introduces students on the basic pharmaceutical principles and technologies in the responsible preparation and handling of pharmaceutical dosage forms and medical devices applied in the health care system. The

students are expected to identify different dosage forms and apply good compounding practices.

Course Code: Phar 4
Course Description: Physical Pharmacy
Course Credit: 3 units lec, 1 unit laboratory
Corequisite: Phar 3

Course Description

This course involves an analysis of application of basic physicochemical principles and methodology as they relate to drug dosage form design, preparation, stabilization and evaluation. It also considers the relationship of these principles to selected therapeutic problems.

Course Code: PHBS 1
Course Description: Pharmaceutical Biochemistry
Course Credit: 3 units lecture, 1 units laboratory
Prerequisite: Phar Chem 2, PhyPath

Course Description

This course deals with the molecular hierarchy of the living cell. It covers the study of the biomolecules: carbohydrates, proteins, lipids, and nucleic acids in relation to their structure and functions in the living system, the generation and storage of metabolic energy, biosynthesis of biomolecules and the transmission and expression of genetic information. It also discusses the importance and correlation of biomolecules to health and diseases.

Course Code: PhMcrPrs
Course Description: Pharmaceutical Microbiology and Parasitology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: PhyPath

Course Description

This course deals with microorganisms, particularly those pathogenic to man, and the parasitic helminthes of man – their biology, the infections they cause, host response to these infections, and their mode of transmission, prevention and treatment. The course provides a laboratory experience in studying microorganisms and parasitic helminthes, and utilizing aseptic techniques for microbial control. It also discusses microbiological aspects of the pharmaceutical industry. Special attention is given to sterilization and disinfection, antibiotics and chemotherapeutic agents.

Course Code: Phar Care 3
Course Description: Complementary and Alternative Medicine
Course Credit: 1 unit lecture
Prerequisite: Phar Care 2

Course Description

This course discusses integrative health care involving in bringing together conventional and complementary approaches together in a systematic way to promote better health outcomes for the patient. Topics will cover factors that influence health and wellness, appropriate use of both conventional and

alternative methods to facilitate the body's healing response. Science-based practices of complementary medicine such as the use of natural products, mind and body practices and other complementary health approaches.

Course Code: Rizal
Course Description: Life and Works of Rizal
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with nationalism in the Philippines and the other historical circumstances that led to its birth. It highlights the role played by Rizal and other national heroes in its development as movement. Included are the study of pre-Spanish period, Filipino culture, the Hispanization of the Filipinos, and the resistance to it, the Propaganda movement of the subsequent Philippine Revolution as inspired by the intellectual legacies of Rizal and other patriots.

Course Code: GEC-MATH
Course Description: Mathematics in the Modern World
Course Credit: 3 units lecture
Pre-requisite: None

Course Description

This course deals with the nature of mathematics, appreciation of its practical, intellectual, and aesthetic dimensions, and application of mathematical tools in daily life.

Course Code: PE 3
Course Description: Individual-Dual Sports and Games
Course Credit: 2 units
Prerequisite: PE 2

Course Description

This course is about the theories, demonstrations and practical works of the games in athletics, badminton and table tennis with emphasis on the development of appreciation and skills in playing.

SECOND SEMESTER

Course Code: EPC
Course Description: English Proficiency Course
Course Credit: 3 units lecture
Prerequisite: GEC-PCOM

Course Description

This enhancement program provides students an excellent opportunity to improve their English proficiency and to help them increase their abilities in the four language skills: speaking, listening, reading and writing. This makes use of interactive communicative activities that will help the students learn independently through their participation in self-access learning activities appropriate to their level and developmental needs using Tell Me More or other related software and learning platforms.

Course Code: FL
Course Description: Foreign Language
Course Credit: 3 units lecture
Prerequisite: None

Course Description

It is designed to develop the knowledge, understanding, and skills involved in learning the secondary language. The course covers the development of the four fundamental skills in foreign language learning: listening, reading, speaking and writing with an emphasis on oral skills. Cultural readings and videos are included in each lesson to supplement the basic text and provide cultural insights and information. For this specific foreign language, the basic concept of Spanish is discussed.

Course Code: Phar Chem 4
Course Description: Pharmaceutical and Medicinal Organic Chemistry
Course Credit: 3 units lecture, 1 unit laboratory
Prerequisite: Phar Chem 2, PHBS 1
Corequisite: PHBS 2

Course Description

This course is designed to provide knowledge of medicinal chemistry and concepts of drug design. This covers the study for Structure Activity Relationship of the different drug classes and its relationship to biological activity and clinical applications. At the end of the course, students are expected to demonstrate understanding in the chemistry of drugs and establishing relationship between drug structures and drug action necessary in drug discovery and development.

Course Code: Phar Chem 5
Course Description: Pharmaceutical Analysis 2 (Instrumental Methods of Analysis)
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: Phar Chem 2, Phar 4, Phar Chem 3

Course Description

This course deals with the important theories, principles, techniques and applications of various quantitative pharmaceutical analyses using different instruments, as applied in the quality control of raw materials and drug products.

Course Code: PHBS 2
Course Description: Pharmacognosy and Plant Chemistry
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: PharBot, Phar Chem 2

Course Description

This course deals with the study of the classification, physical and chemical properties, pharmacological and pharmaceutical uses of natural drugs (including Philippine medicinal plants). It also covers the biosynthesis, extraction, isolation, purification and identification of drug constituents.

Course Code: PHBS 3A
Course Description: Pharmacology 1
Course Credit: 4 units lecture
Prerequisite: PhyPath, PhMcrPrs, PHBS 1

Course Description

This course deals with the study of drugs and their biochemical and physiological effects, mechanisms of actions, pharmacokinetic properties, therapeutic uses, adverse reactions, toxicologic effects and interactions.

Course Code: Ph Info
Course Description: Pharmacy Informatics
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: Phar 3

Course Description

This course is an introduction of methods of gathering and using drug and health-related information from various sources with focus on Information Communication Technology using different web sites and search engines. This also includes the generation of tailor-fit drug information for use of different professionals or patients.

Course Code: PE 4
Course Description: Team Sports and Games
Course Credit: 2 units
Prerequisite: PE 3

Course Description

This course is designed to guide the students to develop the fundamentals of team sports, the different skills in Volleyball and Basketball. It includes an adequate knowledge of the background, interpretation and application of the rules of the games.

TERM BREAK

Course Code: GEC-Ethics
Course Description: Ethics
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course focuses on the principles of ethical behavior in modern society at the level of the person, society and in interaction with the environment and other shared resources.

Course Code: Phar Care 4
Course Description: Dispensing II (medication related problems, medication safety, medication counseling, and other pharmacy services)
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: Phar 3, Phar Care 2

Course Description

This course deals with the application of concepts of dispensing, dispensing techniques and the ethical policies that govern this facet of professional practice of pharmacy. It deals with the different prescription order assessments, drug use review, and designing tailor-fit counseling techniques. The course focuses on the assessment of different kinds of prescription orders to provide quality, safe, and

effective medications.

Course Code: PHBS 4
Course Description: Biopharmaceutics and Pharmacokinetics
Course Credit: 3 units lecture
Prerequisite: Phar 4, PHBS 3A

Course Description

This course deals with the basic principles and factors affecting drug liberation, absorption, metabolism and excretion, including the appropriate mathematical models that describe drug behavior in the body in both normal and altered physiologic states which are necessary for the design of a rational dosage regimen.

THIRD YEAR

FIRST SEMESTER

Course Code: DDM 1
Course Description: Clinical Pharmacy and Pharmacotherapeutics 1
Course Credit: 4 units lecture
Prerequisite: PHBS 3A
Corequisite: PHBS 3B

Course Description

This course is the first in a 2-semester sequence of courses providing a systems-based approach to pharmaceutical care and disease management. Students will learn about disease prevention and health promotion, as well as the drug and non-drug therapy of acute and chronic diseases seen in both hospitalized and ambulatory patients. Emphasis is placed on preventing, identifying, and solving drug-related problems.

Course Code : GEC-ART
Course Description : Art Appreciation
Course Credit : 3 units lecture
Prerequisite : None

Course Description

The course provides an understanding of the nature, function and appreciation of the arts in contemporary society.

Course Code : GEC-RPH
Course Description : Readings in Philippine History
Course Credit : 3 units lecture
Prerequisite : None

Course Description

The course is about Philippine History viewed from the lens of selected primary sources in different periods, analysis and interpretation.

Course Code: Phar 5
Course Description: Hospital Pharmacy
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: Phar Care 4

Course Description

This course covers the minimum standards of hospital pharmacy practice and the competencies of hospital pharmacists, selection of appropriate drug distribution systems and proper channels of communications towards other health professionals.

Course Code: PhManuf 1
Course Description: Pharmaceutical Manufacturing (with Quality Assurance & cGMP)
Course Credit: 2 units lecture, 2 units laboratory
Prerequisite: Phar 4

Course Description

This course presents the basic principles, methods and technology involved in the production of various dosage forms and delivery systems from the initial design of the dosage form to their actual manufacture including the requirements for packaging, equipment and facilities. The course also focuses on Philippine Current Good Manufacturing Practice and how it is applied and regulated throughout the Philippine manufacturing setting.

Course Code: PhManuf 2
Course Description: Drug Discovery and Development
Course Credit: 2 units lecture
Prerequisite: Phar 4

Course Description

This course covers the process of drug discovery and development, from screening, target identification to final drug registration and marketing. Safety evaluation, clinical trials, ethical considerations and the essentials of patent law will also be discussed.

Course Code: PHBS 3B
Course Description: Pharmacology 2
Course Credit: 4 units lecture
Prerequisite: PHBS 3A, PHBS 4

Course Description

This course, a continuation of Pharmacology 1, deals with the pharmacodynamics, pharmacokinetic, toxicological and therapeutic properties of drugs used in the management of cardiovascular, respiratory, gastrointestinal, renal, endocrine, metabolic, coagulative, CNS, immunologic, oncologic, and infectious conditions.

Course Code: RTW 1
Course Description: Pharmacy Research Methods and Pharmaceutical Statistics
Course Credit: 3 units lecture
Prerequisite: PHBS 4, Phar 4, PHBS 2

Course Description

This course deals with the specific problem related to pharmaceutical sciences

that would be worthwhile to investigate during the laboratory work. It will comprise actual pharmaceutical and pharmacologic principles and animal testing which will be conducted inside the laboratory. It also includes thesis writing after experimental results are completed. This course also introduces statistical concepts and analytical methods as applied to data encountered in biomedical sciences. It emphasizes the basic concepts of experimental design, quantitative analysis of data and statistical inferences. The course provides students a foundation to evaluate information critically to support research objectives and product claims and a better understanding of statistical design of experimental trials for biological products/devices.

SECOND SEMESTER

Course Code : GEC-TCW
 Course Description : The Contemporary World
 Course Credit : 3 units lecture
 Prerequisite : None

Course Description

The course deals with globalization and its impact on individuals, communities and nations, challenges and responses.

Course Code: PHBS 5
 Course Description: Pharmaceutical Toxicology
 Course Credit: 2 units lecture, 1 unit laboratory
 Prerequisite: PHBS 3B

Course Description

This course deals with the study of drugs and their biochemical and physiological effects, mechanisms of actions, pharmacokinetic properties, therapeutic uses, adverse reactions, toxicological effects and interactions. The fundamentals of clinical toxicology including a study of the general classes of toxic agents, mechanisms of toxicity, target organ toxicity, management and their detection.

Course Code: DDM 2
 Course Description: Clinical Pharmacy and Pharmacotherapeutics 2
 Course Credit: 4 units lecture
 Prerequisite: DDM 1

Course Description

This course is the second in a 2-semester sequence of courses providing a systems- based approach to pharmaceutical care and disease management. Students will learn about disease prevention and health promotion, as well as the drug and non-drug therapy of acute and chronic diseases seen in both hospitalized and ambulatory patients. Emphasis is placed on preventing, identifying, and solving drug-related problems.

Course Code: PhManuf 3
 Course Description: Cosmetic Product Development (Cosmetic Product Development, Regulation, and Safety Assessment)
 Course Credit: 2 unit lecture, 1 units laboratory

Prerequisite: PhManuf 1

Course Description

This course will review the methodologies used to develop the major types of cosmetic and toiletries products. Idea generation, formulation development, manufacturing considerations, compatibility studies and stability testing will be discussed for each product type. Among the product types to be reviewed will be: personal care products such as creams, lotions, hair products (including shampoos, conditioners, waving products and grooming products), makeup products, shaving products, soaps and related washing products. Particular attention will be given to critical problem areas which can affect the development process as well as the effects of specific ingredients on product performance, stability and product scale-up. Also, this course will provide knowledge about the current regulations and laws governing the use and manufacture of cosmetic products.

Course Code: RTW 2
 Course Description: Pharmacy Research and Thesis Writing
 Course Credit: 1 unit lecture, 2 units laboratory
 Prerequisite: RTW 1

Course Description

This course is a continuation of RTW 1 which deals with the specific problem related to pharmaceutical sciences that would be worthwhile to investigate during the laboratory work. It will comprise actual pharmaceutical and pharmacologic principles and animal testing which will be conducted inside the laboratory. It also includes the thesis writing after experimental results are completed.

Course Code: PhManuf 4
 Course Description: Health Technology Assessments & Health Policy (with Pharmacoeconomics)
 Course Credit: 2 units lecture
 Prerequisite: Ph Manuf 2

Course Description

The course takes a broad view of the assessment of health technologies including medical devices, tests, pharmaceuticals and public health interventions. Emphasis is placed on learning methods to assess the safety, effectiveness, cost effectiveness and ethical considerations associated with the introduction of these health interventions, and of translating the findings into health policy and clinical practice. This course also focuses on assessing and carrying out economic evaluations of medications and medical technologies to optimize health service management using quantitative analysis techniques. Students will learn how to analyze the financing policies of current medications and to manage medications in different healthcare systems.

Course Code: Phar Ad 2
 Course Description: Pharmaceutical Marketing and Entrepreneurship Course
 Credit: 2 units lecture
 Prerequisite: Phar Ad 1

Course Description

This course is designed to equip the students with the knowledge, skills and behavior to ensure efficient pharmacy business operations and management. This course focuses on the management of pharmacy business operations including human resources, finances, goods, and services. This course also aims to teach the approach entrepreneurs use to identify opportunity and create new ventures, the analytical skills that are needed to practice this approach and the background knowledge and managerial skills that are necessary in dealing with the recurring issues involved in starting, growing and harnessing the value of new ventures.

Course Code : GEC-STS
 Course Description : Science, Technology and Society
 Course Credit : 3 units lecture
 Prerequisite : None

Course Description

The course focuses on interactions between science and technology and social, cultural, political and economic contexts which shape and are shaped by them; specific examples throughout human history of scientific and technological developments.

TERM BREAK

Course Code: Phar 7
 Course Description: Legal Pharmacy and Ethics
 Course Credit: 3 units lecture
 Prerequisite: Phar 5

Course Description

This course covers the principles of law and ethics in pharmacy. It examines the national and local laws that impact the practice of pharmacy, emphasizing legal and ethical principles to guide pharmacists in decision-making and in the practice of the profession. It also focuses on the theoretical and practical knowledge regarding the regulation of food, drugs, medical devices and cosmetics. The students will learn the legal and ethical aspects of pharmacy practice and utilize knowledge of laws, regulations and ethical responsibilities of pharmacists to protect the public and ensure the well-being of their patients.

Course Code: Phar Care 5
 Course Description: Community Pharmacy Services and Patient Interactions
 Course Credit: 2 units lecture
 Prerequisite: DDM 2

Course Description

This course is designed as an enhancement on patient medication counseling by training the students to perform simple clinical examinations of the patient and decide whether to treat with OTC or to refer to a physician. This course also includes techniques used in counseling to solicit information from the patient.

Course Code: SAP
 Course Description: Social and Administrative Pharmacy
 Course Credit: 1 unit lecture
 Prerequisite: PhManuf 4

Course Description

The course is designed to equip the students to take up a role as a pharmacist overseeing public services in a government or private institution dedicated to serve the populace through dispensing pharmacy services.

Course Code: Phar 6
 Course Description: Public Health Pharmacy (with Pharmacoepidemiology)
 Course Credit: 3 units lecture
 Prerequisite: PhMcrPrs, DDM 2

Course Description

This course will introduce the students to community health which includes both the private and public (government) efforts of individuals, groups, and organizations to promote, protect, and preserve the health of those in the community. This course also introduces the basic concepts of Pharmacoepidemiology, its application and its relevance as a tool in evidence-based decision making in the public health setting. This course focuses on basic concepts and application of Pharmacoepidemiology in the Pharmacy Practice.

FOURTH YEAR

FIRST SEMESTER

Course Code: Phar Prac 1
 Course Description: Supervised Pharmacy Practice Experience (Institutional)
 Course Credit: 120 hours, 2.4 units
 Prerequisite: Phar 7, Phar Care 4, 4th Year Standing

Course Description

This course seeks to enhance student's drug knowledge and develop professional pharmacy skills through practical situations in actual institutional pharmacy practice. The students will have firsthand experience of the duties and responsibilities of a professional pharmacist in the institutional practice.

Course Code: Phar Prac 2
 Course Description: Supervised Pharmacy Practice Experience (Public Health and Regulatory Pharmacy)
 Course Credit: 180 hours, 3.6 units
 Prerequisite: Phar 6, SAP, PhManuf 4, 4th Year Standing

Course Description

This course seeks to enhance student's drug knowledge and develop professional pharmacy skills through practical situations in actual practice in the role of a pharmacist in public health. The students will also learn more about the processes involved in the regulatory processes that govern the entire pharmacy practice.

Course Code: Phar Prac 3
 Course Description: Supervised Pharmacy Practice Experience (Community)
 Course Credit: 300 hours, 6 units
 Prerequisite: Phar 3, Phar Care 4, PHBS 3B, 4th Year Standing

Course Description

This course seeks to enhance student's drug knowledge and develop

professional pharmacy skills through practical situations in an actual community pharmacy practice. The students will have firsthand experience of the duties and responsibilities of a professional pharmacist in the field of retail community pharmacy.

Course Code: PAC 1
Course Description: Pharmacy Assessment Course 1
Course Credit: 9 units lecture
Prerequisite: DDM 2, PhManuf 3, Phar 5, 4th Year Standing

Course Description

This course is designed to prepare students for the licensure examination for pharmacists. The emphasis of the course will be on strategies for test taking skills, practice drills for problem solving and critical thinking using multiple choice exam format. It is an intensive and comprehensive review of the different disciplines namely: Pharmaceutical Chemistry, Pharmacognosy and Biochemistry, Practice of Pharmacy, Pharmacology and Toxicology, Pharmaceutics, and Quality Control and Microbiology from 1st year to 3rd year levels.

SECOND SEMESTER

Course Code: Phar Prac 4
Course Description: Supervised Pharmacy Practice Experience (Hospital Pharmacy)
Course Credit: 300 hours, 6 units
Prerequisite: Phar 5, DDM 2, 4th Year Standing

Course Description

This course seeks to enhance the knowledge acquired in Phar 7 and to develop professional pharmacy skills through actual life situations in a hospital setting where students will have firsthand experience of the duties and responsibilities of a professional pharmacist and processes in the field of hospital pharmacy.

Course Code: Phar Prac 5
Course Description: Supervised Pharmacy Practice Experience (Industry)
Course Credit: 300 Hours, 6 Units
Prerequisite: Ph Manuf 3, Phar Ad 1, Phar Ad 2, Ph Info, Phar 7, 4th Year Standing

Course Description

This course seeks to enhance their knowledge acquired in the whole Pharmaceutics Cluster courses and to develop professional pharmacy through actual life situations in manufacturing pharmacies where students will have firsthand experience of the duties and responsibilities of a professional pharmacist and the processes in the field of manufacturing pharmacy.

Course Code: PAC 2
Course Description: Pharmacy Assessment Course 2
Course Credit: 9 units lecture
Prerequisite: PAC 1

Course Description

This course is a continuation of PAC 1 that is designed to prepare students for the licensure examination for pharmacists. The emphasis of the course will be on strategies for test taking skills, practice drills for problem solving and critical thinking using multiple choice exam format. It is an intensive and comprehensive review of the different disciplines namely: Pharmaceutical Chemistry, Pharmacognosy and Biochemistry, Practice of Pharmacy, Pharmacology and Toxicology, Pharmaceutics, and Quality Control and Microbiology from 1st year to 3rd year levels.

BACHELOR OF SCIENCE IN PHYSICAL THERAPY

FIRST YEAR

FIRST SEMESTER

Course Description: Being Skills Course 1
Course Credit: 1.5 units lecture
Prerequisite: None

Course Description

The course is designed to equip students with self-awareness tools that will provide the groundwork for emotional literacy, productivity, and resilience.

Course Code: GEC-UTS
Course Description: Understanding the Self
Course Credit: 3 units lecture
Pre-requisites: None

Course Description

This course deals with nature of identity; factors and forces that affect the development and maintenance of personal identity.

Course Code: GEC-MATH
Course Description: Mathematics in the Modern World
Course Credit: 3 units lecture
Pre-requisites: None

Course Description

This course deals with nature of mathematics, appreciation of its practical, intellectual, and aesthetic dimensions, and application of mathematical tools in daily life,

Course Code: GEC-PCOM
Course Description: Purposive Communication
Course Credit: 3 units lecture
Pre-requisites: None

Course Description

This course deals with writing, speaking and presenting to different audiences and for various purposes.

Course Code: PE 1
Course Description: Physical Fitness and Gymnastics
Course Credit: 2 units
Pre-requisites: None

Course Description

This course deals with the study of the meaning of physical education and its objectives, the study of fundamental movements and the study of physical fitness and how one can make it beneficial throughout life.

Course Code: NSTP 1
Course Description: National Service Training Program 1
Course Credit: 3 units
Pre-requisites: None

Course Description

This course is in pursuant to Section 12 of RA 9163 otherwise known as the National Service Training Program (NSTP) Act of 2001. It is a course for first year students both males and females design to help them understand, appreciate and eventually live the basic concepts of the Student's Transformation and Enrichment for Truth (STET) with the end in view of empowering them into becoming a potent resource for community development. It includes the following concepts: volunteerism, self-awareness and team building.

Course Code: Ana 1
Course Description: Gross and Organ System Anatomy
Course Credit: 3 units lecture, 2 units laboratory
Pre-requisites: None

Course Description

It provides detailed account of the structural features, organization, and relationships of the human body related to Physical Therapy practice, with the exception of the nervous system. It also provides an opportunity for students to explore and appreciate the human body through models, pictures, and other related activities.

Course Code: PhyTher 1
Course Description: Introduction to Physical Therapy
Course Credit: 3 units lecture, 1 unit laboratory
Pre-requisites: None

Course Description

Introduction to the nature, scope, and practice of physical therapy, which includes its history. It will also provide opportunities to learn about general techniques of patient care and emergency procedures, and an appreciation of medical terminologies and assistive and medical technologies.

SECOND SEMESTER

Course Code: BSC 2
Course Description: Being Skills Course 2
Course Credit: 1.5 units lecture
Prerequisite: BSC 1

Course Description

After the foundation has been set, the course will enable students to practice habits that contribute to healthy collaboration with peers.

Course Code: GEC-RPH
Course Description: Readings in Philippine History
Course Credit: 3 units lecture
Pre-requisites: None

Course Description

This course deals with Philippine History viewed from the lens of selected primary sources in different periods, analysis and interpretation.

Course Code: PE 2
Course Description: Rhythmic Activities
Course Credit: 2 units
Pre-requisites: PE 1

Course Description

This course seeks to study both the theoretical and practical aspect of dancing to develop the inborn sense of rhythm. The emphasis of this course is on learning on the fundamentals of the Philippine Folk Dances, Ballroom dances and other types of dances.

Course Code: NSTP 2
Course Description: National Service Training Program 2
Course Credit: 3 units
Pre-requisites: NSTP 1

Course Description

This course is designed to encourage the youth to continue to the improvement of the general welfare and the quality of life of Filipinos. This course requires the students to carry out projects and activities in their assigned community, barangay/s, government and non-government agencies. Students are required to submit documented report particularly those social activities contributory to the general welfare and betterment of life for the members of the community or the enhancement of its facilities, especially those devoted to improving health, education, safety, livelihood, entrepreneurship, morals of the citizenry and other social welfare services.

Course Code: Physio
Course Description: Physiology of the Human Body
Course Credit: 5 units lecture
Pre-requisites: Ana 1

Course Description

This course is designed to deepen the understanding of the human body by understanding the processes and functions of the human body. Emphasis is placed on the physiological basis of conditions and responses commonly encountered in the clinical practice of physical therapy. In addition, students are allowed to explore using manageable activities to promote their appreciation of the physiologic

concepts.

Course Code: Ana 2
Course Description: Neuroanatomy
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: Ana 1

Course Description

It provides detailed account of the structural features, organization, and relationships of the human nervous system related to Physical Therapy practice. It also provides an opportunity for students to explore and appreciate the components of the nervous system through models and pictures.

Course Code: ORAD
Course Description: Organization and Administration in PT
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: PhyTher 1, GEC-PCOM

Course Description

This course aims to expose the students to the basic principles and methodologies of organization and management and their specific application in different settings of PT practice.

Course Code: TL
Course Description: Teaching and Learning
Course Credit: 3 units lecture, 1 unit laboratory
Prerequisite: PhyTher 1, GEC-PCOM

Course Description

The course examines the principles of learning across the lifespan. It is designed to provide information on learning and teaching principles and methodology, planning of learning experiences, clinical teaching tools and strategies, formulation of objectives, effective feedback and performance evaluation within the context of adult education. The integration and application of teaching strategies and methods selected and developed for a specific audience will be emphasized particularly the issues regarding teaching peers, patients, caregivers, families, and the community.

SECOND YEAR

FIRST SEMESTER

Course Code: GEC-TCW
Course Description: The Contemporary World
Course Credit: 3 units lecture
Pre-requisites: None

Course Description

This course deals with globalization and its impact on individuals, communities and nations, challenges and responses.

Course Code: Ana 3
Course Description: Applied Anatomy and Kinesiology
Course Credit: 3 units lecture, 1 unit laboratory
Prerequisite: Ana 1, Physio

Course Description

It deals with the movement-related functions and biomechanical properties of selected human body structures and the interrelationships, and the study of how humans normally move. It also focuses on the biomechanical and kinesiological implications of normal and dysfunctional bodily motion in the performance of some activities of daily living.

Course Code: Health Care
Course Description: Community Development and Public Health for Mass Education
Course Credit: 3 units lecture, 1 unit laboratory
Prerequisite: Ana 1, Ana 2, Physio, ORAD, TL

Course Description

It deals with the study of the foundations of community health that includes human demography and epidemiology. It emphasizes the promotion of community public health and environmental health production. This course is designed to guide the students in developing and implementing a plan for community involvement with the elderly, children, or the disadvantaged. Community involvement to promote wellness and prevention of movement disorders will be the focus of involvement in these communities.

Course Code: PhyTher 2
Course Description: Principles of PT Evaluation
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: Ana 1, Ana 2, Physio, PhyTher 1

Course Description

Basic principles and techniques of examination commonly used in musculoskeletal, orthopaedic, integumentary, cardiopulmonary, and neurological physical therapy assessment to guide formulation of PT treatment goals and plans. This includes introduction to techniques of history taking, evaluating results of examination using clinical reasoning and understanding of function and disability, and accurate documentation of findings according to prescribed format.

Course Code: PhyTher 3
Course Description: Physical Agents and Electrotherapy
Course Credit: 3 units lecture, 2 units laboratory
Pre-requisites: Ana 1, Ana 2, Physio, PhyTher 1

Course Description

It deals with the principles and techniques, physical and physiological bases, indications and contraindications for therapeutic use of heat, cold, light, water, and electrical currents, as well as mechanical principles of tilt table, traction, and compression therapy. It also includes evidence-based practice on use of modalities and implications of results of electrodiagnostic tests on electrotherapeutic management. This course is based on a problem-solving approach for the selection and application of appropriate intervention strategies to manage different conditions encountered by a Physical Therapist.

Course Code: HGD
Course Description: Human Growth and Development

Course Credit: 3 units lecture
Prerequisite: Ana 1, Ana 2, Physio

Course Description

Theories and principles of growth and development; various stages of growth and development in terms of motor, perceptual, cognitive, language and psychological aspects; including effects of disability on the growth pattern in each age group.

Course Code: PE 3
Course Description: Swimming
Course Credit: 2 units
Pre-requisites: PE 2

Course Description

This course will teach non-swimmers and/or fearful swimmers how to relax in the water. It will focus on beginning techniques of swimming, basic swimming skills, and standard swimming strokes.

SECOND SEMESTER

Course Code: Entrep
Course Description: Entrepreneurship
Course Credit: 3 units lecture
Prerequisite: ORAD

Course Description

The course aim to teach the approach entrepreneurs use to identify opportunity and create new ventures, the analytical skills that are needed to practice this approach and the background knowledge and managerial skills that are necessary in dealing with the recurring issues involved in starting, growing and harnessing the value of new ventures.

Course Code: EPC
Course Description: English Proficiency Course
Course Credit: 3 units lecture
Prerequisite: GEC-PCOM

Course Description

This enhancement program provides students an excellent opportunity to improve their English proficiency and to help them increase their abilities in the four language skills: speaking, listening, reading and writing. This makes use of interactive communicative activities that will help the students learn independently through their participation in self-access learning activities appropriate to their level and developmental needs using Tell Me More or other related software and learning platforms.

Course Code: FL
Course Description: Foreign Language
Course Credit: 3 units lecture
Prerequisite: None

Course Description

It is designed to develop the knowledge, understanding, and skills involved in learning the secondary language. The course covers the development of the four fundamental skills in foreign language learning: listening, reading, speaking and writing with an emphasis on oral skills. Cultural readings and videos are included in each lesson to supplement the basic text and provide cultural insights and information.

Course Code: Innov PT
Course Description: Innovations in PT Service Delivery (Clinical and Non-Clinical Systems)
Course Credit: 2 units lecture, 1 unit laboratory
Pre-requisites: ORAD, PhyTher 1, PhyTher 2, Health Care

Course Description

This course will discuss the current and future roles of physical therapists in healthcare, professional practice and research, and the impact of physical therapy in integrated models of health care. It will provide an in-depth understanding of the challenges facing innovation in the physical therapy field, as well as recent innovations in physical therapy technology offering new ways to improve diagnosis, treatment, patient engagement, and patient care. It will allow the students to implement innovative approaches to deliver cost-effective services and improve access to quality care and data management, guided by the use of standardized outcome measures and evidence-based practice.

Course Code: PE 4
Course Description: Team Sports and Games
Course Credit: 2 units
Prerequisite: PE 3

Course Code: PhyTher 4
Course Description: Basic Therapeutic Exercises for Wellness and Health Promotion
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2

Course Description

This course provides an introduction to the theory, scientific principles, and evidence for the use of various types of exercise employed by physical therapists for the promotion, maintenance, and restoration of optimal health and physical function. It will focus on health and wellness concepts, and the principles and application of basic exercises employed by physical therapists. Case-based instruction, evidence-based practice, and clinical reasoning are emphasized.

Course Code: PhyTher 5
Course Description: Orthosis, Prosthesis and Assistive Devices
Course Credit: 3 units lecture, 1 unit laboratory
Prerequisite: Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2

Course Description

This course focuses on pre- and post-surgical physical therapy interventions and

functional rehabilitation of individuals requiring orthotic, prosthetic or assistive devices. It deals with biomechanical principles of upper and lower extremity prosthetics and orthotics, spinal orthotics, assistive technology, wheelchair design, and adaptive seating with emphasis on options, components, assessment, measurement, prescription, management and patient instruction. This will also include topics such as bandaging, taping, and bed mobility and transfers.

TERM BREAK

Course Code: CBR 1
 Course Description: Community-Based Rehabilitation 1
 Course Credit: 3 units lecture
 Prerequisite: ORAD, PhyTher 1, Health Care

Course Description

Theories and principles of community-based rehabilitation in the Philippine context. Students will learn to assess the needs of PWDs in the community, develop plan of action, and design activities consistent with the World Health Organization's definition of CBR.

Course Code: Ethics 1
 Course Description: Bioethics
 Course Credit: 3 units lecture
 Pre-requisites: GEC-UTS

Course Description

This course deals with principles of ethical behavior in modern society at the level of the person, society and in interaction with the environment and other shared resources.

Course Code: Industrial Rehab
 Course Description: Industrial Rehabilitation
 Course Credit: 3 units lecture
 Prerequisite: Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2

Course Description

Focuses on physical therapy assessment and treatment approaches to promote the workers' well-being and prevent work-related musculoskeletal disorders and injuries. Its emphasis is on injury prevention, physical rehabilitation and treatment, and return-to- work strategies. It will also deal with the identification, analysis, and evaluation of common office ergonomic risk factors and reduction of risk factors through high level job modification techniques. It will also introduce the students to commonly used office ergonomic assessment tools and evaluation techniques designed to identify high risk activities, rank multiple jobs for the need for ergonomic revisions, and provide direction for selection of office ergonomic solutions to reduce associated risk factors.

Course Code: Psychia
 Course Description: Psychiatric Foundations in PT
 Course Credit: 3 units lecture
 Prerequisite: Ana 1, Ana 2, Physio, HGD

Course Description

This course deals with the concepts associated with psychiatric screening of patients handled by physical therapists. It introduces the student to the specific medical terminologies and concepts associated to psychiatry, including the diagnostic classification of psychiatric conditions and treatment methods used in psychiatry, and their impact on the physical functions, learning potential of patients, and adjustments in the delivery of physical therapy management.

THIRD YEAR

FIRST SEMESTER

Course Code: CBR 2
 Course Description: Community-Based Rehabilitation 2
 Course Credit: 2 units laboratory
 Prerequisite: CBR 1, Innov PT

Course Description

It focuses on the application of theories and principles of community-based rehabilitation focusing on the adopted community. The students will be trained concerning the methods, processes, and strategies to identify and manage the needs of both the persons with disabilities (PWDs) and their community to facilitate the empowerment and reintegration of PWDs into society.

Course Code: Res 2
 Course Description: Research Proposal Writing
 Course Credit: 2 units laboratory
 Prerequisite: Res 1, Innov PT

Course Description

The course will allow the students to systematically develop a sound proposal to answer a validated research question. Students will be guided throughout the course by assigned advisers concerning the methods, protocols, and strategies required to successfully present and publish research proposals.

Course Code: Ethics 2
 Course Description: Professional Ethics
 Course Credit: 1 unit laboratory
 Prerequisite: Ethics 1

Course Description

This course will allow the students to apply ethical reasoning in physical therapy practice through mastering the use of the ethical principles and the process of ethical reasoning in simulated situations and dilemmas encountered by physical therapists. The cases will cover the academic, clinical, research and clinical settings. Cultural competency will also be discussed.

Course Code: Clin Ed 1
 Course Description: Orthopedic, Sports, Integumentary, & Surgical Conditions
 Course Credit: 3 units laboratory
 Prerequisite: Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5, Industrial Rehab

Course Description

It encompasses commonly encountered orthopedic, sports, integumentary, and surgical conditions by physical therapists in clinical practice. It aims to integrate basic knowledge with the pathological description of the identified conditions and their medical management, and their corresponding physical therapy assessment and treatment. Sound clinical reasoning and evidence-based practice are emphasized.

Course Code: Clin Ed 2

Course Description: Geriatric & Rheumatic PT

Course Credit: 2 units laboratory

Prerequisite: Ana 1, Ana 2, Ana 3, Physio, HGD, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5

Course Description

It encompasses commonly encountered rheumatologic conditions and concerns experienced by geriatric population in clinical practice. It aims to integrate basic knowledge with the pathological description of the identified conditions and their medical management, and their corresponding physical therapy assessment and treatment. Sound clinical reasoning and evidence-based practice are emphasized.

Course Code: Clin Ed 3

Course Description: Other Medical Conditions (Obstetrics, Oncology, Endocrine & Immunology)

Course Credit: 2 units laboratory

Prerequisite: Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5

Course Description

It encompasses commonly encountered obstetric, oncologic, endocrine & immunologic conditions by physical therapists in clinical practice. It aims to integrate basic knowledge with the pathological description of the identified conditions and their medical management, and their corresponding physical therapy assessment and treatment. Sound clinical reasoning and evidence-based practice are emphasized.

Course Code: GEC-STC

Course Description: Science, Technology & Society

Course Credit: 3 units lecture

Pre-requisites: None

Course Description

This course deals with interactions between science and technology and social, cultural, political and economic contexts which shape and are shaped by them; specific examples throughout human history of scientific and technological developments.

SECOND SEMESTER

Course Code: Clin Ed 4

Course Description: Neurologic PT

Course Credit: 3 units lecture, 2 units laboratory

Prerequisite: Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5

Course Description

It encompasses commonly encountered neurologic conditions in the clinical practice of physical therapy, affecting either the peripheral or central nervous system. It aims to integrate basic knowledge with the pathological description of the identified conditions and their medical management, and their corresponding physical therapy assessment and treatment. Sound clinical reasoning and evidence-based practice are emphasized.

Course Code: Clin Ed 5 Course Description: Pediatric PT

Course Credit: 2 units laboratory

Prerequisite: Ana 1, Ana 2, Ana 3, Physio, HGD, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5

Course Description

It encompasses commonly encountered pediatric conditions in the clinical practice of physical therapy, which may be developmental, neurologic, or musculoskeletal. It aims to integrate basic knowledge with the pathological description of the identified conditions and their medical management, and their corresponding physical therapy assessment and treatment. Sound clinical reasoning and evidence-based practice are emphasized.

Course Code: Clin Ed 6

Course Description: Cardiopulmonary PT

Course Credit: 3 units laboratory

Prerequisite: Ana 1, Ana 2, Ana 3, Physio, PhyTher 1, PhyTher 2, PhyTher 3, PhyTher 4, PhyTher 5

Course Description

It encompasses commonly encountered cardiovascular, lymphatic, and pulmonary conditions by physical therapists in clinical practice. It aims to integrate basic knowledge with the pathological description of the identified conditions and their medical management, and their corresponding physical therapy assessment and treatment. Sound clinical reasoning and evidence-based practice are emphasized.

Course Code: Res 3

Course Description: Research Implementation and Dissemination

Course Credit: 2 units laboratory

Prerequisite: Res 1, Res 2

Course Description

The emphasis of this course is on the implementation of the developed research. It covers the systematic, ethical and judicious conduct of established research protocol in order to answer the identified research question. Students are given the opportunity to work on their chosen practice setting, demonstrate their communication, management, and leadership skills, and monitor their adherence to the research process in order to complete this course.

Course Code: Health Info
Course Description: Health Informatics and Social Media
Course Credit: 2 units lecture, 1 unit laboratory
Pre-requisites: PhyTher 1

Course Description

It addresses the intersection of healthcare and information technology to develop efficient systems, processes, and uses of health data across the continuum of healthcare delivery to improve patient care and advance individual and population health outcomes. The focus will be on the resources, devices, and methods required to optimize the acquisition, storage, retrieval, and use of information in health and biomedicine. This course will explore a number of health informatics tools that include not only computers but also clinical guidelines, formal medical terminologies, and information and communication systems.

Course Code: GEC-ART
Course Description: Art Appreciation
Course Credit: 3 units lecture
Pre-requisites: None

Course Description

This course deals with nature, function and appreciation of the arts to contemporary society.

Course Code: Rizal
Course Description: Life and Works of Rizal
Course Credit: 3 units lecture
Pre-requisites: None

Course Description

This course deals with nationalism in the Philippines and the historical circumstances that led to its birth. It highlights the role played by Rizal and other national heroes in its development as movement. Included are the study of pre-Spanish period, Filipino culture, the Hispanization of the Filipinos and the resistance to it, the Propaganda movement of the subsequent Philippine Revolution as inspired by the intellectual legacies of Rizal and other patriots.

FOURTH YEAR

FIRST SEMESTER

Course Code: Internship 1
Course Description: Clinical Internship
Course Credit: 15 units
Prerequisite: Level I - III

Course Description

It is an intensive and comprehensive 5 –month practical and theoretical training in the different affiliation centers and hospitals with emphasis on developing professional behaviors in the clinical environment.

Course Code: Res 4
Course Description: Writing for Publication and Research Translation Course
Credit: 2 units laboratory

Prerequisite: Res 1, Res 2, Res 3

Course Description

The emphasis of this course is on the development and presentation of a publishable research paper. It covers the interpretation and analysis of data collected, synthesis of findings to available literature and research context, and the delivery of sound and justified conclusion and recommendations. Students will implement these scholarly skills in small groups by presenting their work (both manuscript and oral presentation) during college research colloquium.

SECOND SEMESTER

Course Code: Internship 2
Course Description: Clinical Internship
Course Credit: 15 units
Prerequisite: Internship I

Course Description

It is an intensive and comprehensive 5 –months practical and theoretical training in the different affiliation centers and hospitals with emphasis on developing professional behaviors in the clinical environment.

Course Code: Compre in PT
Course Description: Comprehensive Examination in PT
Course Credit: 6 units lecture
Prerequisite: Level I - III

Course Description

This course is designed to prepare students for the licensure examination for physical therapist. The emphasis of the course will be on strategies for test taking skills, practice drills for problem solving and critical thinking using multiple choice exam formats. It is an intensive and comprehensive review of the different disciplines namely: Basic Sciences, Medical Conditions and PT Applications from 1st year to 3rd year level.

BACHELOR OF SCIENCE IN RADIOLOGIC TECHNOLOGY

FIRST YEAR

FIRST SEMESTER

Course Code: BSC 1
Course Description: Being Skills Course 1
Course Credit: 1.5 units lecture
Prerequisite: None

Course Description

The course is designed to equip students with self-awareness tools that will provide the groundwork for emotional literacy, productivity, and resilience.

Course Code: GEC-UTS
Course Description: Understanding the Self

Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with the nature of identity; factors and forces that affect the development and maintenance of personal identity.

Course Code: GEC-RPH
Course Description: Readings in Philippine History
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with Philippine History viewed from the lens of selected primary sources in different periods, analysis and interpretation.

Course Code: GEC-MATH
Course Description: Mathematics in the Modern World
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with the nature of mathematics, appreciation of its practical, intellectual, and aesthetic dimensions, and application of mathematical tools in daily life.

Course Code: GEC-PCOM
Course Description: Purposive Communication
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course involves writing, speaking and presenting to different audiences and for various purposes.

Course Code: Intro to RT
Course Description: Introduction to Rad Tech and Healthcare
Course Credit: 3 units lecture
Prerequisite: None

Course Description

Prologue to Radiologic Technology education and practice which will provide an understanding on the scope, outputs, and practices of radiological sciences in general and Radiologic Technology in particular. This course also deals on the interaction of science and technology and their impact to society and environment and study of the foundations of community health that includes human ecology, demography and epidemiology. It emphasizes the promotion of community public health and environmental health production. Integrated with the course is a discussion on TB etiology, pathogenesis, diagnosis, prevention and control, an overview on Directly Observed Treatment Short Course (DOTS) for TB control and its application to the community with particular emphasis on the best practices and

approaches in Private-Public DOTS (PPMD).

Course Code: RT 101
Course Description: Medical Terminology
Course Credit: 3 units lecture
Prerequisite: None

Course Description

Deals with various medical nomenclatures and their usage as applied to specific systems, disease processes, and injuries. Discussions include principal medical root word, terms referring to some general aspects of the practice of medicine and its allied profession, medical terms referring to certain general pathological processes, infective diseases, diseases of various systems of the body, obstetric terms, and terms related to medical instruments and equipment.

Course Code: NSTP1
Course Description: National Service Training Program
Course Credit: 3 units
Prerequisite: None

Course Description

This course is in pursuant to Section 12 of RA 9163 otherwise known as the National Service Training Program (NSTP) Act of 2001. It is a course for first year students both males and females design to help them understand, appreciate and eventually live the basic concepts of the Student's Transformation and Enrichment for Truth (STET) with the end in view of empowering them into becoming a potent resource for community development. It includes the following concepts: volunteerism, self-awareness and team building.

Course Code: PE 1
Course Description: Physical Fitness and Gymnastics
Course Credit: 2 units
Prerequisite: None

Course Description

This course deals with the study of the meaning of Physical Education and its objectives, the study of fundamental movements and the study of physical fitness and how one can make it beneficial throughout life.

SECOND SEMESTER

Course Code: BSC 2
Course Description: Being Skills Course 2
Course Credit: 1.5 units lecture
Prerequisite: BSC 1

Course Description

After the foundation has been set, the course will enable students to practice habits that contribute to healthy collaboration with peers.

Course Code: GEC-ETHICS
Course Description: Ethics
Course Credit: 3 units lecture

Prerequisite: None
Course Description
This course deals with the principles of ethical behavior in modern society at the level of the person, society and in interaction with the environment and other shared resources.

Course Code: GEC-TCW
Course Description: The Contemporary World
Course Credit: 3 units lecture
Prerequisite: None

Course Description
This course deals with globalization and its impact on individuals, communities and nations, challenges and responses.

Course Code: FL
Course Description: Foreign Language
Course Credit: 3 units lecture
Prerequisite: None

Course Description
It is designed to develop the knowledge, understanding, and skills involved in learning the secondary language. The course covers the development of the four fundamental skills in foreign language learning: listening, reading, speaking and writing with an emphasis on oral skills. Cultural readings and videos are included in each lesson to supplement the basic text and provide cultural insights and information.

Course Code: Rizal
Course Description: Life and Works of Rizal
Course Credit: 3 units lecture
Prerequisite: None

Course Description
This course deals with nationalism in the Philippines and the historical circumstances that led to its birth. It highlights the role played by Rizal and other national heroes in its development as movement. Included are the study of pre-Spanish period, Filipino culture, the Hispanization of the Filipinos, and the resistance to it, the propaganda movement of the subsequent Philippine Revolution as inspired by the intellectual legacies of Rizal and the other patriots.

Course Code: RT 102
Course Description: Imaging Science and Informatics
Course Credit: 3 units lecture
Prerequisite: RT 100

Course Description
This course aims to improve the efficiency, accuracy, usability and reliability of medical imaging services and to the study of how information about and contained within medical images is retrieved, analyzed, enhanced, and exchanged throughout the medical enterprise.

Course Code: RT 103
Course Description: Image Production and Characteristics
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: RT 100

Course Description
This course aims to know equipment and physics of x-ray production. It includes basic x-ray circuits. Also examines the relationship of conventional and digital equipment components to the imaging process.

Course Code: NSTP2
Course Description: National Service Training Program
Course Credit: 3 units
Prerequisite: NSTP1

Course Description
This course is designed to encourage the youth to continue to the improvement of the general welfare and the quality of life of Filipinos. This course requires the students to carry out projects and activities in their assigned community, barangay/s, government and non-government agencies. Students are required to submit documented report particularly those social activities contributory to the general welfare and betterment of life for the members of the community or the enhancement of its facilities, especially those devoted to improving health, education, safety, livelihood, entrepreneurship, morals of the citizenry and other social welfare services.

Course Code: PE 2
Course Description: Rhythmic Activities
Course Credit: 2 units
Prerequisite: PE 1

Course Description
This course seeks to study both the theoretical and practical aspect of dancing to develop the inborn sense of rhythm.

SECOND YEAR FIRST SEMESTER

Course Code: Ana & Physio
Course Description: Human Anatomy and Physiology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: RT 101

Course Description
The course is designed to provide allied medical students with an anatomical terminologies and concepts on basic human anatomy and physiology which explain the physical and chemical basis of the origin, development and progression of life and normal adaptive responses to changes in the external and internal environment in the maintenance of homeostasis in the normal human being.

Course Code: GEC-ART
Course Description: Art Appreciation

Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with nature, function and appreciation of the arts to contemporary society.

Course Code: GEC-STS
Course Description: Science, Technology and Society
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course includes interactions between science and technology and social, cultural, political and economic contexts which shape and are shaped by them; specific examples throughout human history of scientific and technological developments.

Course Code: RT 104
Course Description: Principles of Imaging
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: RT 103

Course Description

Radiographic image quality and the effects of exposure variables and the effects of exposure variables, and the synthesis of all variables in image production

Course Code: RT 105
Course Description: Professional Ethics, Jurisprudence and Cultural Sensitivity
Course Credit: 3 units lecture
Prerequisite: None

Course Description

Application of ethical principles and the process of ethical reasoning to situations and dilemmas encountered by the radiologic technologist in academe and clinical practice, discussion on cultural competency and supervision, laws and regulations governing the practice of radiologic technology, professional ethics, relevant medical jurisprudence, and other legal and ethical concerns. of the morals, standards, and principles of a specific culture and society.

Course Code: RT 106
Course Description: Patient Care and Management
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: Anatomy and Physiology

Course Description

Study the elements of patient care and management as they relate to radiography.

Course Code: PE 3
Course Description: Individual- Dual Sports & Games
Course Credit: 2 units

Prerequisite: PE 2

Course Description

This course is about the theories, demonstrations and practical works of the games in athletics, badminton, bowling and table tennis with emphasis on the development of appreciation and skills in playing.

SECOND SEMESTER

Course Code: Entrep
Course Description: Entrepreneurship
Course Credit: 3 units lecture
Prerequisite: RT 106

Course Description

The course aim to teach the approach entrepreneurs use to identify opportunity and create new ventures, the analytical skills that are needed to practice this approach and the background knowledge and managerial skills that are necessary in dealing with the recurring issues involved in starting, growing and harnessing the value of new ventures.

Course Code: EPC
Course Description: English Proficiency
Course Credit: 3 units lecture
Prerequisite: GEC-PCOM

Course Description

This enhancement program provides students an excellent opportunity to improve their English proficiency and to help them increase their abilities in the four language skills: speaking, listening, reading and writing. This makes use of interactive communicative activities that will help the students learn independently through their participation in self-access learning activities appropriate to their level and developmental needs using Tell Me More or other related software and learning platforms.

Course Code: RT 107
Course Description: Radiobiology
Course Credit: 3 units lecture
Prerequisite: RT 103, RT 104

Course Description

This course deals with the study of the effects of ionizing radiation on biological matters, the principles of radiation protection as well as agencies and institutions mandated to regulate and monitor the safe use of radiation and radioisotope in medicine.

Course Code: RT 108
Course Description: Pharmacology and Venipuncture
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: Anatomy and Physiology

Course Description

This course deals with a basic understanding of pharmacology principles and

it is particularly true during radiographic examinations involving contrast media administration, better understand how medications act, possible adverse reactions and the principles of drug administration also to provide the students an opportunity to develop a fundamental concept of the skills needed to competently, proficiently, safely perform intravenous contrast media administration.

Course Code: RT 109
 Course Description: Imaging Equipment and Maintenance
 Course Credit: 2 units lecture, 1 unit laboratory
 Prerequisite: RT 104

Course Description

An introduction to the basics of electricity, electromagnetism, motors, generators, transformers, and rectifiers. Discussions include mathematical review, units of measure, structure of matter, electrostatics, current, electricity, magnetism and physical principle of radiation, its characteristics, properties, interaction with matter and application in radiological sciences.

Course Code: RT 110
 Course Description: Film-Screen Image Acquisition, Processing and Image Analysis
 Course Credit: 2 units lecture, 1 unit laboratory
 Prerequisite: RT 103

Course Description

Deals with different system and accessories involved in the conversion of latent image into visible radiographic in age following sequential steps in manual and automatic processing or well application of various parameters that affects the production of a radiograph.

Course Code: RT 111
 Course Description: Administration and Leadership
 Course Credit: 3 units lecture
 Prerequisite: None

Course Description

Deals with the organization, function, supervision and budgetary outlay of radiological facility and include management and human resource administration, elements of hospital administration, administration of radiological facility supervision, acquisition of information about historical and contemporary theories, concepts, and issues associated with leadership.

Course Code: RT 112
 Course Description: Computed and Digital Radiography
 Course Credit: 3 units lecture
 Prerequisite: Ana & Physio

Course Description

This course aims to understand between digital and computed radiography each component, image process; like 3D reconstruction, utilize digital subtraction technique.

Course Code: PE 4
 Course Description: Team Sports and Games
 Course Credit: 2 units
 Prerequisite: PE 3

Course Description

This course is designed to guide the students to develop the fundamentals of team sports, the different skills in Volleyball and Basketball. It includes an adequate knowledge of the background, interpretation and application of the rules.

THIRD YEAR

FIRST SEMESTER

Course Code: RT 113A
 Course Description: Radiographic Positioning and Radiologic Procedures1
 Course Credit: 3 units lecture, 1 unit laboratory
 Prerequisite: Ana & Physio

Course Description

This course deals with the study of the general foundation of positioning technique to obtain radiographic demonstration of anatomical structure of interest as well as specialized radiographic examinations of the different body structures and organs without contrast media. This includes anatomic and radiographic positioning terms, source- image receptor distance and tube film alignment, positioning principles, radiographic demonstrated, and evaluation criteria of examinations of the different organs and body structures. Clinical competency is accomplished through positioning demonstration and return demonstration.

Course Code: RT 114
 Course Description: Radiologic Contrast Examination
 Course Credit: 3 units lecture, 1 unit laboratory
 Prerequisite: Ana & Physio

Course Description

This course deals with the study of specialized radiographic examinations with application of contrast media to enhance and/or visualize different organs and body structures of interest. This includes types of contrast media, its characteristics and properties, indications and contraindications, and mode of administration; patient preparation and types of examinations of the gastro intestinal tract, genitourinary system, central nervous system, vascular system and other contrast examinations.

Course Code: RT 115
 Course Description: Ultrasonography
 Course Credit: 3 units lecture
 Prerequisite: Ana & Physio

Course Description

This course deals with the study of the physical foundation of ultrasound and its application to medical diagnosis.

Course Code: RT 116
Course Description: Radiation Protection
Course Credit: 3 units lecture
Prerequisite: RT 107, RT 110

Course Description

This course deals with the study of the effects of ionizing radiation on biological matters, the principles of radiation protection as well as agencies and institutions mandated to regulate and monitor the safe use of radiation and radioisotope in medicine.

Course Code: RT 117
Course Description: Radiographic Anatomy and Physiology
Course Credit: 3 units lecture
Prerequisite: Ana & Physio

Course Description

Study of the structure and function of the human body with radiographic correlation.

Course Code: RT 118
Course Description: Quality Assurance and Quality Control
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: RT 103, RT 104

Course Description

This course deals with the study of organized effort in the management of a radiological facility to ensure consistent production of high standard of quality images with minimum exposure to patient and personnel.

Course Code: Research 1
Course Description: Introduction to Medical Research
Course Credit: 3 units lecture
Pre-requisite: None

Course Description

This is a sequel of Elements of Research. This will deal with the application of research from the implementation of the research design up to the making of the abstract. Submission of a hardbound copy of the approved research study is a requirement for graduation.

SECOND SEMESTER

Course Code: RT 113B
Course Description: Radiographic Positioning and Radiologic Procedures 2
Course Credit: 3 units lecture, 1 unit laboratory
Prerequisite: RT 113A

Course Description

This course deals with the continuation of the general foundation of positioning technique to obtain radiographic demonstration of anatomical structure of interest as well as specialized radiographic examinations of the different body

structures and organs without contrast media. This includes anatomic and radiographic positioning terms, source-image receptor distance and tube film alignment, positioning principles, radiographic demonstrated, and evaluation criteria of examinations of the different organs and body structures. Clinical competency is accomplished through positioning demonstration and return demonstration.

Course Code: RT 119
Course Description: Computerized Tomography
Course Credit: 3 units lecture
Prerequisite: Ana & Physio

Course Description

This course deals with the study of principles involved in diagnostic imaging modalities that produces cross-sectional, trans-axial, coronal and sagittal images of the human body.

Course Code: RT 120
Course Description: Magnetic Resonance Imaging
Course Credit: 3 units lecture
Prerequisite: Ana & Physio

Course Description

This course deals with the study of principles involved in diagnostic imaging modalities that produces cross-sectional, trans-axial, coronal and sagittal images of the human body.

Course Code: RT 121
Course Description: Mammography
Course Credit: 2 units lecture
Prerequisite: Ana & Physio

Course Description

This course deals with the study of principles involved in diagnostic imaging modalities that produces cross-sectional, trans-axial, coronal and sagittal images of the human body.

Course Code: RT 122
Course Description: Radiologic Pathology
Course Credit: 3 units lecture
Prerequisite: RT117, Ana & Physio

Course Description

This course deals with the study of various pathologic conditions and its effect on radiological procedures, techniques, and overall radiographic image.

Course Code: RT 123
Course Description: Interventional Radiology
Course Credit: 3 units lecture
Prerequisite: Ana & Physio

Course Description

This course deals with the study of the principles involved in Digital Subtraction

Angiography and Interventional Radiography; the parameters of imaging and equipment employed in these subspecialties.

Course Code: RT 124
Course Description: Radiotherapy
Course Credit: 3 units lecture
Prerequisite: Ana & Physio

Course Description

This course deals with the study of the precise application of ionizing radiation in the treatment of neo-plastic growth, a complete and effective treatment plan as well as patient care of oncology cases.

Course Code: RT 125
Course Description: Nuclear Medicine
Course Credit: 3 units lecture
Prerequisite: Ana & Physio

Course Description

This course deals with the study of the principles and administration in Nuclear Medicine and its diagnostic and therapeutic applications.

Course Code: Research 2
Course Description: Rad. Tech Research Paper Writing & Presentation
Course Credit: 1 unit lecture, 2 units laboratory
Prerequisite: Research 1

Course Description

Experimentation of the research, data gathering and presentation of the final research paper through oral defense.

FOURTH YEAR

FIRST SEMESTER

Course Code: Clin Ed 1
Course Description: Clinical Education 1
Course Credit: 18 units
Prerequisite: Level I-III

Course Description

Clinical Education is the Radiologic Technology Internship Program which consists of 5 ½ months practical and theoretical training. This program requires the Radiologic Technology Interns to be assigned to various affiliation hospitals of the school. Satisfactory completion of the Internship Program is a requirement for graduation. The Radiologic Technology Intern shall undertake to perform or assist in various general and specific radiographic examinations with at least eight hundred eighty (880) hours radiographic examinations during the entire Internship period.

Course Code: Sem 1
Course Description: Seminar 1
Course Credit: 3 units lecture
Prerequisite: Level I-III

Course Description

This course will present the advancement and technological innovations in the field of radiological sciences to include physics update, educational concerns, and issues and opinions of interest in Radiologic Technology through journal and article reviews, case presentations, symposia, and seminars.

SECOND SEMESTER

Course Code: Clin Ed 2
Course Description: Clinical Education 2
Course Credit: 18 units
Prerequisite: Clin Ed 1

Course Description

Clinical Education 2 is the continuation of Clinical Education 1. The Radiologic Technology Internship Program will consist 5 ½ months practical and theoretical training. This program requires the Radiologic Technology Interns to be assigned to various affiliation hospitals of the school. Satisfactory completion of the Internship Program is a requirement for graduation. The Radiologic Technology Intern shall undertake to perform or assist in various general and specific radiographic examinations with at least eight hundred eighty (880) hours radiographic examinations during the entire Internship period.

Course Code: Sem 2
Course Description: Seminar 2 with Radiologic Technology Assessment Program
Course Credit: 3 units RLE
Prerequisite: Sem 1

Course Description

This course is an intensive and comprehensive review of the professional courses in Radiologic Technology program. The emphasis of the course is on the strategies for test taking skills, practice drills for problem solving and critical thinking skills. The course is designed to prepare students for the licensure examination for Radiologic Technologist. Student should pass the comprehensive examination at the end of the semester to qualify for graduation.

BACHELOR OF SCIENCE IN BIOLOGY major in MEDICAL BIOLOGY

FIRST YEAR

FIRST SEMESTER

Course Code: BIO 101
Course Description: General Botany
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: None

Course Description

This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of

seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. The laboratory exercises are coordinated with lecture topics and may include field exercises.

Course Code: BIO 102
Course Description: General Zoology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: None

Course Description

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function, including comparative systems of selected groups. Laboratory exercises include microscope observations and dissections to reinforce topics discussed in lecture.

Course Code: BSC 1
Course Description: Being Skills Course 1
Course Credit: 1.5 units lecture
Prerequisite: None

Course Description

The course is designed to equip students with self-awareness tools that will provide the groundwork for emotional literacy, productivity, and resilience.

Course Code: GEC-PCOM
Course Description: Purposive Communication
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course involves writing, speaking and presenting to different audiences and for various purposes.

Course Code: GEC-UTS
Course Description: Understanding the Self
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with the nature of identity; factors and forces that affect the development and maintenance of personal identity.

Course Code: GEC-MATH
Course Description: Mathematics in the Modern World
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with the nature of mathematics, appreciation of its practical, intellectual, and aesthetic dimensions, and application of mathematical tools in daily life.

Course Code: PE 1
Course Description: Physical Fitness and Gymnastics
Course Credit: 2 units
Prerequisite: None

Course Description

This course gives light to the concepts and objectives of Physical Education and Physical Fitness. This is intended to uplift wellness among the lives of the learners through application of the topics discussed and activities presented. In focus are physical fitness and gymnastics which invigorate development in the three domains of learning.

Course Code: NSTP 1
Course Description: National Service Training Program 1
Course Credit: 3 units
Prerequisite: None

Course Description

This course is pursuant to Section 12 of RA 9163 otherwise known as the National Training Service Program (NSTP) Act of 2001. The Civic Welfare Training Service (CWTS) is a component of NSTP. It is a course for first year students both males and females designed to help the, understand, appreciate and eventually live by the basic concepts of the Student's Transformation and Enrichment for Truth (STET) with the end in view of empowering them into becoming a potent resource for community development. It includes the following concepts: volunteerism, self-awareness and team building.

SECOND SEMESTER

Course Code: BIO 103
Course Description: Systematic Biology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 101, BIO 102

Course Description

This course teaches the science of taxonomy. It describes the foundational principles of naming, classification and the hierarchy of taxa. It teaches the methods of reconstruction of evolutionary pattern/phylogenetic relationship. Topics to be covered include the science of taxonomy/systematic; its history and development, theories of biological classification and their history, taxonomic collection and the process of classification, taxonomic character, the methods of classifying (archetypical and hierarchical), zoological/botanical nomenclature, the specie concept, the rules of zoological nomenclature, interpretation of the rules of nomenclature, the methods of reconstruction of evolutionary pattern/phylogenetic relationship and taxonomic publication.

Course Code: BIO 104
Course Description: Chemical Biology 1 (Organic Molecules)
Course Credit: 2 units lecture, 2 units laboratory
Prerequisite: BIO 101, BIO 102

Course Description

This course introduces the chemistry important to biological processes. Emphasis is on the aspects of general, organic, and biological chemistry that apply to biological systems and processes. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups.

Course Code: BIO 105
Course Description: Statistical Biology
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: GEC-MATH

Course Description

This course will explore the use of statistical methodology in designing, analyzing, interpreting, and presenting biological experiments and observations. It covers descriptive statistics, elements of experimental design, probability, hypothesis testing and statistical inference, analysis of variance, correlation, regression techniques, and non-parametric statistical methods. Throughout the course, the application of statistical techniques within a biological context will be emphasized, using data from laboratory and field studies.

Course Code: BSC 2
Course Description: Being Skills Course 2
Course Credit: 1.5 units lecture
Prerequisite: BSC 1

Course Description

After the foundation has been set, the course will enable students to practice habits that contribute to healthy collaboration with peers.

Course Code: FL
Course Description: Foreign Language
Course Credit: 3 units lecture
Prerequisite: None

Course Description

It is designed to develop the knowledge, understanding, and skills involved in learning the secondary language. The course covers the development of the four fundamental skills in foreign language learning: listening, reading, speaking and writing with an emphasis on oral skills. Cultural readings and videos are included in each lesson to supplement the basic text and provide cultural insights and information. For this specific foreign language, the basic concept of Spanish is discussed.

Course Code: GEC-STS
Course Description: Science, Technology and Society

Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course includes interactions between science and technology and social, cultural, political and economic contexts which shape and are shaped by them; specific examples throughout human history of scientific and technological developments.

Course Code: PE2
Course Description: Rhythmic Activities
Course Credit: 2 units
Prerequisite: None

Course Description

This course seeks to study both the theoretical and practical aspects of dancing to develop the inborn sense of rhythm. The emphasis of this course is on learning on the fundamentals of the Philippine Folk Dances, Ballroom dances and other types of dances.

Course Code: NSTP 2
Course Description: National Service Training Program 2
Course Credit: 3 units
Prerequisite: None

Course Description

This course is designed to encourage the youth to continue the improvement of the general welfare and the quality of life of Filipinos. This course requires the students to carry out projects and activities in their assigned community, barangay/s, government and non- government agencies. Students are required to submit documented report particularly those social activities contributory to the general welfare and betterment of life for the members of the community or the enhancement of its facilities, especially those devoted to improving health, education, safety, livelihood, entrepreneurship, morals of the citizenry and other social welfare services.

TERM BREAK

Course Code: BIO 106
Course Description: General Ecology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 103

Course Description

This course covers population, community and ecosystem level ecology of plants and animals. It focuses on the interactions of organisms with each other and with their abiotic environment. The course will focus on understanding the interconnections among different concepts and facts. The course will explore the theories and practice of ecology at many different levels of biological organization: the individual, populations of conspecifics, species interactions, and communities. Relationships between basic ecological science and current environmental problems is included in the course.

Course Code: BIO 107
Course Description: Chemical Biology II (Analytical Methods for Biology)
Course Credit: 2 units lecture, 2 units laboratory
Prerequisite: BIO 104

Course Description

This course emphasizes the quantitative aspects of biology. Starting with classical measurements of volumes and masses, the course will develop statistical tools of estimation, confidence, accuracy, and precision in treating experimental data. This includes an introduction to instrumental methods of analysis. Specific analytical techniques or concepts covered are: gravimetric and volumetric analyses, aqueous solution equilibrium principally involving complexation equilibria, spectrophotometric analysis, electrochemical methods, atomic spectroscopy, and chromatographic methods. These topics will be covered from the point of view of theory, the associated analytical instrumentation and relevant computational methods.

Course Code: GEC-ART
Course Description: Art Appreciation
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with nature, function and appreciation of the arts to contemporary society.

SECOND YEAR

FIRST SEMESTER

Course Code: Ana & Phy
Course Description: Human Anatomy and Physiology with Pathophysiology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 102

Course Description

This course is designed to provide allied medical students with anatomical terminologies and concepts on basic human anatomy and physiology, which explain the physical and chemical basis of the origin, development and progression of life and normal adaptive responses to changes in the external and internal environment in the maintenance of homeostasis in the normal human being.

Course Code: BIO 201
Course Description: Chemical Biology III (Biomolecules)
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 107

Course Description

This course aims to give the student an understanding of biomolecules in both chemical and biological contexts by introducing the central types of biological macromolecules: proteins, nucleic acids carbohydrates and lipids, demonstrating that fundamental organic chemistry defines the structure and thereby the function

of these biological macromolecules and illustrating that the function of biological macromolecules is normally of fundamental organic chemical nature. The course includes basic understanding of the structures, properties and functions of the main types of biological macromolecules: proteins (including enzymes), carbohydrates and lipids and the outline the main pathways of metabolism in the cell: catabolic (breakdown) reactions yielding energy and anabolic (biosynthetic) reactions leading to new structures within the cell.

Course Code: BIO 202
Course Description: Evolutionary Biology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 103

Course Description

This course deals with the study of the changes in life forms over time; changes that have occurred over millions of years as well as those that have occurred over just a few decades. It will discuss the history of life according to the fossil record and a discussion of the broad range of life forms as they are currently classified. Various mechanisms of evolution, how these mechanisms work, and how change is measured will also be discussed.

Course Code: GEC-ETHICS
Course Description: Ethics
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with the principles of ethical behavior in modern society at the level of the person, society and in interaction with the environment and other shared resources.

Course Code: GEC-RPH
Course Description: Readings in Philippine History
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with Philippine History viewed from the lens of selected primary sources in different periods, analysis and interpretation.

Course Code: PE 3
Course Description: Individual-Dual Sports & Games
Course Credit: 2 units
Prerequisite: None

Course Description

This course is about the theories, demonstrations and practical works of the games in athletics, badminton, bowling, and table tennis with emphasis on the development of appreciation and skills in playing.

Course Code: Rizal
Course Description: Life and Works of Rizal
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with nationalism in the Philippines and the historical circumstances that led to its birth. It highlights the role played by Rizal and other national heroes in its development as movement. Included are the study of pre- Spanish period, Filipino culture, the Hispanization of the Filipinos and the resistance to it, the Propaganda movement of the subsequent Philippine Revolution as inspired by the intellectual legacies of Rizal and other patriots.

SECOND SEMESTER

Course Code: BIO 203
Course Description: Genetics
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 103

Course Description

This course discusses the mechanisms of heredity and variation, cytogenetics, mutation, nature of genes, population genetics, quantitative genetics, human genetics and evolutionary genetics; biometrical procedures.

Course Code: BIO 204
Course Description: General Physiology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: Ana & Phy

Course Description

This course will study the functions of living things with emphasis on the chemical and physical properties of protoplasm, the conversion of energy and matter through cell respiration and synthesis, the transport of materials across membranes, cell excitability and contraction, and regulatory processes. The course includes experimental investigation of various functions of cells by isolation and characterization of subcellular parts and examination of cellular processes such as membrane transport and cell excitability.

Course Code: BIO 205
Course Description: Biophysics
Course Credit: 2 units lecture, 2 units laboratory
Prerequisite: Ana & Phy

Course Description

This course will introduce the physical principles that underlie the dynamics of life from the macro to molecular scale and will cover a broad spectrum of topics including aspects of biotechnology, bioengineering, nanotechnology, and biomedical physics. This course will explore topics in bio-electricity based on the classical theory of electricity and magnetism and will introduce nuclear physics in biology and medicine. The course will also focus on applications of quantum physics in biology and medicine.

Course Code: BIO 206
Course Description: Microbiology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 201

Course Description

This course will study the structure and characteristics of bacteria, viruses, and fungi, and their metabolism, genetics, ecology, and use in biotechnological applications with special emphasis on forms pathogenic for humans. Metabolism and genetics of microorganisms and principles of immunology; host-microbe interactions; pathogenesis of bacterial, fungal, and viral diseases and their medication will also be discussed. Laboratory sessions will focus on basic microbiological techniques for isolating, examining, and identifying bacteria, fungi, and viruses; experimental investigation of their characteristics.

Course Code: Entrep
Course Description: Entrepreneurship
Course Credit: 3 units lecture
Prerequisite: None

Course Description

The course aims to teach the approach entrepreneurs use to identify opportunity and create new ventures, the analytical skills that are needed to practice this approach and the background knowledge and managerial skills that are necessary in dealing with the recurring issues involved in starting, growing and harnessing the value of new ventures.

Course Code: EPC
Course Description: English Proficiency Course
Course Credit: 3 units lecture
Prerequisite: GEC-PCOM

Course Description

This enhancement program provides students an excellent opportunity to improve their English proficiency and to help them increase their abilities in the four language skills: speaking, listening, reading and writing. This makes use of interactive communicative activities that will help the students learn independently through their participation in self-access learning activities appropriate to their level and developmental needs using Tell Me More or other related software and learning platforms.

Course Code: PE 4
Course Description: Team Sports and Games
Course Credit: 2 units
Prerequisite: None

Course Description

This course is designed to guide the students to develop the fundamentals of team sports, the different skills in volleyball and basketball. It includes an adequate knowledge of the background, interpretation and application of the rules of the

games.

TERM BREAK

Course Code: BIO 207
Course Description: Introduction to Research in the Life Sciences
Course Credit: 3 units lecture
Prerequisite: Level I-II

Course Description

The course deals with the study of the general concepts of the research process in the life sciences. It also includes the study of the rudiments in the preparation of research including problem identification, literature search, limitations and scope of the study, statistical analysis, budget preparation and Gantt chart preparation.

Course Code: BIO 208
Course Description: Epidemiology and Public Health
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: Ana & Phy

Course Description

This course is designed to introduce epidemiology, its methods, and its role in public health. A major portion of the course will be devoted to an overview of fundamental epidemiologic methods used in public health research and practice. The students will be familiarized with basic measures used in describing disease frequency in populations. Descriptive and analytic approaches to the study of disease will be explored, and a perspective on the role of epidemiologic methods in health services planning and evaluation will be provided. Problem solving exercises will be used to provide students with an opportunity to tabulate data and apply subject matter developed during lectures and in reading assignments. At the end of the course students should have a general understanding of the uses and limitations of epidemiologic inquiry.

Course Code: GEC-TCW
Course Description: The Contemporary World
Course Credit: 3 units lecture
Prerequisite: None

Course Description

This course deals with globalization and its impact on individuals, communities and nations, challenges and responses.

THIRD YEAR

FIRST SEMESTER

Course Code: BIO 301
Course Description: Cell and Molecular Biology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 203

Course Description

This course will introduce students to the dynamic relationships between cell

structure and the biochemical reactions that are necessary for cell growth, differentiation, survival and death with an emphasis on eukaryotic cells. The course includes structural analysis and functional correlations of cytoplasmic and nuclear components of plant, animal, and microbial cells; analysis of mitosis and meiosis; analysis of developmental mechanisms at the cellular level. Introduction to techniques and tools of biochemistry, cytology, and tissue culture. The course will also discuss the molecular mechanisms involved in the expression of genetic information; the control of macromolecular synthesis; the aggregation of macromolecules into DNA-protein complexes, membranes, chromosomes, and cell organelles; and an introduction to recombinant DNA technology. The course will emphasize the importance of both modern and classical biomedical research and medicine of a comprehensive understanding of cell structure and function.

Course Code: BIO 302
Course Description: Bioinformatics
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: BIO 208

Course Description

This course will cover material related to the analysis of modern genomic data; sequence analysis, gene expression/functional genomics analysis, and gene mapping/applied population genetics. The course will focus on statistical modeling and inference issues. The course also includes the algorithmic aspects of modern bioinformatics and covers the following topics: computational gene hunting, sequencing, DNA arrays, sequence comparison, pattern discovery in DNA, genome rearrangements, molecular evolution, computational proteomics, and others.

Course Code: BIO 303
Course Description: Developmental Biology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 204

Course Description

This course will discuss the current understanding of the molecular mechanisms that regulate animal development. Evolutionary mechanisms are emphasized as well as the discussion of relevant diseases. Vertebrate (mouse, chick, frog, fish) and invertebrate (fly, worm) models are covered. Specific topics include formation of early body plan, cell type determination, organogenesis, morphogenesis, stem cells, cloning, and issues in human development.

Course Code: BIO 304
Course Description: General and Clinical Pathology 1
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 204

Course Description

This course is concerned with the study of the causes and nature of the diseases, together with corresponding anatomical and functional changes. The first part of the course deals with the general pathologic processes, cell injury, inflammation and repair, infectious diseases, immunopathology and principles of neoplasia. The second part is devoted to the study of diseases affecting each organ system. The course is designed in such a way that the basic principles learned during the first

part become the basis for understanding the disease processes affecting the various organ systems. Emphasis is placed on those diseases that are common in the locally and/or of clinical interest. Rare diseases are discussed and presented in so far as they contribute to the understanding of the mechanisms of diseases. In each of the diseases, the student is required to know the etiology, pathogenesis or pathophysiologic mechanisms, the characteristic morphologic (gross and histopathologic) alterations and the clinical and laboratory findings.

Course Code: BIO 305
Course Description: Research Implementation in the Life Sciences
Course Credit: 2 units lecture, 3 units laboratory
Prerequisite: BIO 207

Course Description

This course deals with the completion of the research process started in the Introduction to Research in the Life Sciences. Emphasis is on the presentation, analysis and interpretation of data and summary of findings and recommendations in a publishable format.

SECOND SEMESTER

Course Code: BIO 306
Course Description: General and Clinical Pathology 2
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 304

Course Description

This course is a continuation of concepts learned in General and Clinical Pathology 1. It is concerned with the study of the causes and nature of the diseases, together with corresponding anatomical and functional changes. The course is devoted to the study of diseases affecting each organ system. Emphasis is placed on those diseases that are common locally and/or of clinical interest. Rare diseases are discussed and presented in so far as they contribute to the understanding of the mechanisms of diseases. In each of the diseases, the students are required to know the etiology, pathogenesis or pathophysiologic mechanisms, the characteristic morphologic (gross and histopathologic) alterations, and the clinical and laboratory findings.

Course Code: BIO 307
Course Description: Clinical Pharmacology
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 304

Course Description

This course is designed to enable the students to learn to appreciate basic pharmacologic principles in the diagnosis, treatment, and prevention of disease processes. Case topics will help students learn rational drug therapy that will be valid for drugs currently available and possibly for future drugs as well. The course emphasizes the principles of individualization of drug therapy and covers the following relevant topics: pharmacogenetics, drug use in liver and renal disease, drugs in special populations (the neonate and infant, the pregnant and elderly), drug interactions, adverse drug reactions, and therapeutic drug monitoring.

Course Code: BIO 308
Course Description: Research Dissemination and Publication
Course Credit: 2 units lecture, 1 unit laboratory
Prerequisite: BIO 305

Course Description

This course will entail the preparation of the research manuscripts from the course on Research Implementation in the Life Sciences in preparation for dissemination and publication. The actual presentation of the research in a public forum (either oral or poster) and its publication in a reputable peer-reviewed journal are expected terminal outputs of the course.

Course Code: BIO 309
Course Description: Genomics and Proteomics
Course Credit: 3 units lecture, 2 units laboratory
Prerequisite: BIO 301

Course Description

This course deals with a rapidly evolving scientific area that introduces students into genomes and proteomes. Students would learn about genomics and proteomics, and offer basic knowledge of genome sequencing, major differences between prokaryotic and eukaryotic genomes, basic proteomics and its applications. Students will gain skills in applied bioinformatics, comparative, evolutionary, human genomics and functional genomics. Emphasis is given to techniques used in eukaryotes (plants and animals) to allow students to understand the responses of these organisms at the 'whole-genome' level to biotic and abiotic stresses. It also covers the topic of pharmacogenomics and the implications of applying 'personalised medicine' in human health. The environmental, economic and ethical aspects of this emerging technology will be examined and discussed.

Course Code: BIO 310
Course Description: Biology Practicum
Course Credit: 3 units lab
Prerequisite: Level I-III

Course Description

All students pursuing a B.S. degree in Biology must complete 3-unit credits under the practicum requirement. This will provide students the opportunity to apply their classroom knowledge to hands-on projects. Students will undergo approximately 160 hours thru externship in an approved institution or independent research or project.

TRAINING LINKAGES

Amang Rodriguez Memorial Medical Center
Armed Forces of the Philippines Medical Center
Batangas Healthcare Hospital-Jesus of Nazareth
Batangas Healthcare Specialists Medical Center
Batangas Medical Center
Batangas Provincial Hospital
Christ the Saviour General Hospital Inc.
Daniel Mercado Medical Center Drugmakers Laboratories Inc.
Interphil Laboratories
Jose Reyes Memorial Medical Center Lipa City District Hospital
LPU-B Community-Based Rehabilitation Mary
Mediatrix Medical Center
Metafactor Wellness Center
Metro Lipa Medical Center
Mount Carmel Diocesan General Hospital
MVM Sto. Rosario District Hospital National Children's Hospital
N.L. Villa Memorial Medical Center
Oriental Mindoro Provincial Hospital
Our Lady of Caysasay Medical Center Our Lady of Mediatrix Medical Center
Pharmacy Preceptors Guild of the Philippines, Inc.
Philippine Association of Colleges of Pharmacy, Inc.
Philippine Cerebral Palsy Inc.
Philippine Children's Medical Center Philippine Food and Drug Administration
Philippine Heart Center
Philippine Orthopedic Center Physiocare Medical Clinic
Ranier's Research and Development Institute
San Antonio Life Care Hospital
San Jose District Hospital
San Pablo College Medical Center
St. Pascal de Baylon Hospital South Star Drug
Southern Luzon Drug Corp. (Mercury Drug)
St. Frances Cabrini Medical Center
United Doctor's of St. Camillus de Lellis Hospital
Veterans Memorial Medical Center
Watsons Pharmacy

PROFESSIONAL AFFILIATIONS

ASEAN Association of Schools of Medical Technology
Batangas Medical Society
Biorisk Association of the Philippines
CALABARZON Research Council
International Association of Scholarly Publisher, Editors and Reviewers National
Research Council of the Philippines
Network of CALABARZON Educational Institutions, Inc.
Network of Professional Researchers and Educators, Inc.
Philippine Association of Deans and Faculties of Colleges of Radiologic Technology Inc.
Philippine Association of Health Professional Educators
Philippine Association of Medical Technologists
Philippine Association of Radiologic Technologists
Philippine Association of Rehabilitation Sciences Schools
Philippine Association of Schools of Medical Technology and Public Health
Philippine Blood Coordinating Council
Philippine Council for Quality Assurance in Clinical Laboratories
Philippine Pharmaceutical Association
Philippine Physical Therapy Association
Philippine Red Cross – Batangas Chapter
Philippine Society for Educational Research and Evaluation
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