

CEBU DOCTORS' UNIVERSITY
GRADUATE SCHOOL
Mandaue City

CURRICULUM

MASTER OF SCIENCE in PHARMACY (MSPh)

I FOUNDATION SUBJECTS -----6 units

Educ 100 Methods of Research.3
Educ 101 Statistics and Epidemiology3

II MAJOR SUBJECTS ----- 24 units

MSPh 100 . .Advanced Pharmaceutical Chemistry3
MSPh 101 Advanced Biochemistry.....3

MSPh 102 Advanced Pharmacology and Toxicology.3
MSPh 103 Modern Techniques in Pharmaceutical Chemistry 3

MSPh 104 New Product Development and Formulation.....3
MSPh 105 Concepts of Clinical Pharmacy.....3

MSPh 106 Antibiotics..... 3
MSPh 107 Advanced Phytochemistry.....3

III COGNATES -----9 units

MSPh 110 Ethical and Legal Issues..... 3
MSPh 111 Computer and Informatics.....3
MSPh 112 Seminar – Contemporary Issues and Concerns.....3

MASTER'S THESIS -----6 units

SUMMARY

Foundation Subjects.....	6
Major Subjects.....	24
Cognates.....	9
Master's Thesis.....	6
Total.....	45

COURSE REQUIREMENTS

Comprehensive Examination
Master's Thesis

COURSE DESCRIPTIONS

FOUNDATION SUBJECTS(credit:6 units)

Educ 100 – Methods of Research(credit:3 units; lecture:54 hours)

This course exposes the graduate students pursuing their master course to the research process in education through discussion of the steps and examination of completed research reports. A requirement for submission is a research design on approved topic

Educ 101 – Statistics and Epidemiology – (credit:3 units; lecture:54 hours)

Statistics deals with the collection, organization, presentation, analysis and interpretation of biological information that can be stated numerically. This course uses statistical methods to summarize the data and statistical procedures to reach certain conclusions that can be applied to pharmaceutical research. Practical emphasis is given to study design and the interpretation of results of pharmaceutical research

MAJOR SUBJECTS(credit:24 units)

MSPh 100 - Advanced Pharmaceutical Chemistry(credit:3 units; lecture:54 hours)

Chemical characterization of naturally occurring and synthetic medicinal compounds, structurism, properties, synthesis, reactions and the correlation between chemical structure and biological activity.

MSPh 101 - Advanced Biochemistry(credit:3 units); lecture:54 hours)

This course covers in detail the molecular basis of life, which includes the chemistry of biomolecules, structure function relationship, transformation of matter and energy, storage of genetic information, accession and manipulation. The course provides the basic concepts in biochemistry and how these concepts can be applied in the biological sciences, health and medicine, agriculture, food and related industries.

MSPh 102 - Advanced Pharmacology and Toxicology(credit:3 units; lecture:54 hours)

The course prepares the graduate students to have a clear understanding and in-depth consideration of the principles, concepts and molecular mechanism to toxicity. The current statues of toxicologic principles concerned with public health, drugs, food technology, veterinary medicine and agricultures will be examined. The course embraces the knowledge of the physicchemical properties of the toxic agents and toxins, their physiological and biological effects, toxicokinetic/toxicodynamics, safety and hazards of their uses and management of poisoning.

MSPh 103 - Modern Techniques in Pharmaceutical Chemistry(credit:3 units; lecture:54 hours)

A rigorous treatment of spectrophotometric, electrometric, chromatographic techniques and other methods of physico-chemical treatment.

MSPh 104 - New Product Development and Formulation I(credit:3 units; lecture:54 hours)

A course focused on the practical application of principles, regulations and methods in the development of new products with special emphasis on plant products. It traces the flow of activities from the quality control of active ingredients, preformulation, pharmacologic studies (preclinical) formulation and production phase and clinical studies (phase I to III) to post-marketing. Regulatory issues are also presented.

MSPh 105 - Concepts on Clinical Pharmacy(credit:3 units; lecture:54 hours)

Patient-oriented pharmacy practice; drug-use, history, medication profile, unit-dose drug distribution, drug-use information and consultation.

MSPh 106 – Antibiotics(credit:3 units; lecture:54 hours)

Discussion of the natural source of antibiotics, their isolation, industrial production, pharmaceutical preparations and medicinal and industrial uses. Concepts involving the proper use of antibiotics.

MSPh 107 - Advanced Phytochemistry(credit:3 units; lecture:54 hours)

A rigorous study of plant constituents, their structural features which form the basis of their medicinal and pharmaceutical uses, their isolation, purification and identification. It also includes a survey of biochemical processes which are of special interest in understanding metabolic processes in plants.

COGNATES(credit:9 units)

MSPh 110 – Ethical and Legal Issues (credit:3 units; lecture:54 hours)

This course discusses the different ethical issues in the field of pharmacy. The course provides basic principles of ethics in health and pharmacy, morals and ethical decision-making of pharmacists. It also includes laws relevant to the practice of pharmacy.

MSPh 111 – Computer and Informatics(credit:3 units; lecture: 54 hours)

This course is designed to provide graduate students adequate basic knowledge in computer as well as hands-on training in the fundamental skills in computer operations and applications.

MSPh 112 – Seminar-Contemporary Issues and Concerns (credit: 3 units)

This seminar pertains to contemporary issues and concerns in the profession of pharmacy. The graduate student will have the opportunity to ask relevant questions, get the answers and interact with experts in their field of specialization.

MASTER'S THESIS (credit:6 units)

Original and in-depth research on pharmaceutical research