

GRADUATE SCHOOL MISSION STATEMENT

We are a Catholic institution dedicated to advancing the frontiers of knowledge in the theoretical and applied fields through quality graduate education that is comprehensive and responsive to the needs of society. We are committed to the formation of scholars and high level professionals who are ethical, competent, compassionate and committed to the service of the Church, the Nation and the Global Community.

GRADUATE SCHOOL VISION STATEMENT

We envision a Graduate School that stands for excellence and innovation and that will be globally identified for the distinction of its programs and quality of its research.

GRADUATE SCHOOL GOALS

To realize this mission-vision, the Graduate School commits itself within the next five (5) years:

- To develop the intellect and creativity through excellence in instruction, research, and extension work.
- To form scholars and high level professionals in the arts and humanities, the natural and allied health sciences, the social and management sciences who are ethical and who demonstrate competencies functional in both the local and global workplace.
- To hone the professional and social skills, and critical capabilities of students enabling them to become responsible leaders in their careers and community.

- To provide students opportunities to serve the larger community through extension work and community service.
- To produce quality research in the various fields of knowledge that is internationally recognized.
- To recruit Faculty who are acknowledged experts in the field and to complement the teaching staff by inviting international scholars in the various disciplines.
- To build partnerships and linkages between the Graduate School and academic institutions, industry and government entities at the local and international level.
- To enhance the image and visibility of the Graduate School and its work in both the local and global community.

APPLICATION PROCEDURES

- A. Application for admission to the UST Graduate School is until October 15 for October enrollees, April 5 for Summer enrollees and May 25 for June enrollees.
- B. Application forms for Admission are available at the UST Graduate School, UST Admissions Office & at the UST Graduate School Web Site – <http://www.ust.edu.ph>

REQUIREMENTS:

Certified true copy of Transcript of Records, one (1) colored passport size, recent photo (if any) document(s) attesting to passing a Bar/Board Exam, or being a scholar of any agency.

Two (2) Referral Forms: One(1) for the current (immediate) superior (or Dean, in the case of a school); and the other, for the professor in one specialization (major) subject.

For Foreigners:

All of the above and;

TOEFL English Proficiency and Student Visa Requirements.

ADMISSION REQUIREMENTS

1. Bachelor's Degree in Biology or allied fields with at least 36 units undergraduate Biology with a general average of at least 2.0/85% or B.
2. Complete accomplished application and referral forms.
3. One (1) year teaching working experience.

PHILOSOPHY & OBJECTIVES

The program embodies the School's commitment to improve the teaching of science in secondary schools and in the general education component of the College curriculum. The goal of the program is to provide teachers with opportunities to develop competence in both biology content and teaching methodology. Experienced specialists in the field of education teach the core subjects and scientists teach the major subjects in biology. While the program follows a non-thesis track, the student is required to write a major paper.

CURRICULUM

MASTER IN BIOLOGY EDUCATION

(Non-Thesis Track)

PRE-REQUISITE COURSES: 6 UNITS

GS 500 - St. Thomas on Critical Thinking

As the philosophical foundation of Research Methodology, it is a study of the principles of and skills in critical thinking according to St. Thomas Aquinas in the three areas of mental cognition: simple apprehension, judgment, and reasoning; and of common fallacies towards the acquisition of the art of argumentation.

GS 501 - Research Methodology

The student is introduced to research concepts relevant to Biology Education.

Discussions center on how to prepare a thesis emphasizing choice of title, statement of the problem, sources of data, analysis and evaluation of information gathered among others. Course output is a thesis proposal. Reviews the UST-GS Thesis Writing Guide Booklet.

CORE COURSES: 12 UNITS

EDM 702 - Psychology of Human Growth and Development

The growth stages in human life, the dimensions of growth and the learning tasks to be developed at each stage.

EDM 705 - Philosophy of Education

This course deals with the study of major philosophies of education that have significantly influenced educational practices. It studies questions that concern philosophers of education and tries to define clearly the philosophical terms that assist in the understanding of educational theories. The students are expected to develop the ability to practice philosophical thinking about educational issues. There will be a two-way approach, on one hand, to trace the philosophical base of some educational practices and on the other hand, to discover the consequences of a philosophical thought in the practice of education. To study the branches of philosophy that provide education its foundations. At the outset, an analysis of the reality of education will be made based on St. Thomas Aquinas; philosophical thinking.

EDM 708 - Trends and Practices in Curriculum Development

A study of concepts, foundations, theories, principles, competing models, paradigms, and processes underlying the technical and practical aspects of curriculum planning. Engages students in curriculum planning procedures that allow them to build theories, create visions, and manage strategies for attaining them in the light of both fundamental and contemporary curriculum thoughts and action and institutional changes. Significant researches and fundamental issues, problems, concerns and future directions in the field of curriculum planning and changes are analyzed and synthesized.

EDM 710 - Instructional Materials Preparation & Instrumentation

A theory and practice-based course that deals specifically with both macro and micro level instructional designs in both educational and training settings. Focus is on the development of competencies in the four components: analysis, design, development and evaluation.

EDM 711 - Educational Diagnosis

The assessment of instructional results to identify learner strengths and disabilities: analysis of assessment results and corrective measures.

EDM 715 - Instructional Design

The politics of education in relation of the community; analysis of the input-throughput-output relationships between educational institutions and their service communities.

EDM 720 - Issues & Trends in Science Education

Updates and current concerns in science education.

MAJOR COURSES: 18 UNITS

BIO 600 - Biostatistics

Introduction to the principles of experiment designs and the various statistical tools for interpreting data from biological, medical, and other scientific experiments.

BIO 601 - Natural History and Classification of Living Things

Study of the consideration of the structure and history of arbitrary, natural and phylogenetic classification systems, including problems of specialization and nomenclature.

BIO 602 - Cell and Molecular Biology

Study of cell structure and molecular organization in the cell; functions and processes, and the regulation and control of the biomolecular components of a cell.

BIO 603 - Genetics

Study of the principles of the molecular and physical bases of biological diversity; the mechanism resulting from these diversities and the

principle that govern their heredity from one generation to another.

BIO 604 - Principles of Ecology

Study of the interaction of organisms among themselves and with various factors in the environment.

BIO 722 - Biotechnology

Hands-on experience on laboratory techniques used in biological investigations and which are employed in the local industry. Specific topics are identified by specific mentors.

COGNATE COURSES: 3 UNITS

Environmental Science

The discussion of the environmental factors affecting the life of various forms of living things. Various techniques of environmental monitoring and control are also presented.

OTHER REQUIREMENTS

Graduate Seminar (3 units)
Written Comprehensive Examinations

Total = 42 Units

UST GRADUATE SCHOOL ADMINISTRATION OFFICIALS

AND FACULTY SET-UP

LILIAN J. SISON, Ph.D.

Dean

JOSÉ ANTONIO E. AUREADA, O.P., S.Th.D.

Regent

MICHAEL ANTHONY C. VASCO, Ph.D.

Faculty Secretary

CARLOS P. GARCIA, Ph.D.

Director for Graduate Research

ANNA MARIA GLORIA-WARD, M.A.

Director, Center for Professional Development & Consultancy Services

ROMUALDO DEL ROSARIO, Ph.D.

Supervising Scientist, UST Botanical Garden

MARIBEL G. NONATO, Ph.D.
*Consultant for Biology, Chemistry,
Microbiology & Mathematics*

PROFESSORIAL STAFF

EDUCATION

FR. JOSE ANTONIO AUREADA, S.Th.D.
LOURDES CUSTODIO, Ph.D.
ALLAN DE GUZMAN, Ph.D.
PRAXEDES DELA ROSA, Ed.D.
AMELITA GAERLAN, Ph.D.
LEONORA GUERRERO, Ph.D.
MARCELA LEUS, Ed.D.
ALELI SEVILLA, Ph.D.
EMILY TAN, Ph.D.

BIOLOGY

GRECEBIO JONATHAN ALEJANDRO, Ph.D.
SUSAN BALDIA, Ph.D.
JOSEFINO CASTILLO, M.S.
ROMUALDO DEL ROSARIO, Ph.D.
IRENEO DOGMA, Ph.D.
LYDIA JOSON, Ph.D.
CORAZON MENGUITO, Ph.D.
JOHN DONNIE RAMOS, Ph.D.
ABERCIO ROTOR, Ph.D.
LILIAN SISON, Ph.D.

SCHOOL CALENDAR

The University of Santo Tomas follows an Academic Year Calendar of two (2) semesters and a summer term.

Summer Term: April-May

For further information, please call,
Tele-Fax: (632) 740-9732 or
Tel. No. (632) 786-1611 loc 8247; 731-5396
Web-http://graduateschool.ust.edu.ph
E-mail: odgs@mnl.ust.edu.ph
or write to:

The Dean/Faculty Secretary
UST Graduate School
España, Manila, Philippines 1008

University of Santo Tomas

GRADUATE SCHOOL



GRADUATE PROGRAM

AY 2004 – AY 2006

Biology Education

Master in Biology Education
(Non-Thesis Track)

España, Manila