# Tuskegee University College of Veterinary Medicine, Nursing and Allied Health Master of Science (MS) in Veterinary Science

Contact Information: Dr. Ayman I. Sayegh, Associate Dean, Research and Advanced Studies

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Degree Offered: Master of Science (M.Sin) Veterinary Science

The Master of Science in Veterinary Science of Veterinary Medicine, Nursing and Allied Health produces sussible academicians and investigators in the areas of cancer cell biology, HIV/AIDS, cancerd nano-therapy, reproductive biology, risk analysis / epidemiology, food safeand control of food intake.

## Admission Requirements:

- x Applicants must have completed the B.Sgree from an accredited college or university.
- x Cumulative GPA of 3.0 or better
- x Completed Online Application and Application Fee
- x Official Transcripts from all colleges/unersities (InternationaStudents must have transcripts through World Education Services –WES)
- x GRE Scores at least 540 (old)1656 (new), less than 5 years old
- x Personal Statement
- x 3 Recommendation Letters
- x Resume or Curriculum
- x \*ETS/WES Scores (letrnational students only)
- x TOEFL (International students only)
- x Affidavit of Support and Bank Stement (International students only)

### Graduation Requirements:

x Core Courses: 10x Elective Courses: 17x Research/Thesis: 5

x Admission to Candidacy

x Passing of the Final Oral Examination

### Advisory Committee:

During the first semester of his/her study in Master of Science program, the student and his/her Major Professor must commend to Department Head for approval an Advisory Committee consisting of a minimuof four members including Major Professor and the Department Head. The Advisory Committee shall also serve as the Examination Committee.

<sup>\*</sup> For additional information please refer to the Graduate Handbook

Core Courses (10 credits): Required by All Students

Course Course Number Credit

#### Thesis:

The final draft of the thesis/stration must be filed with that udent's Advisory Committee at least 30 days before the date listed in the training to calendar for final copies to be submitted during the semester in which the student exprects aduate. The student ust present to the Dean of Graduate Programs a "Preliminary Apprair Sheet" (PAS) bearing the signature of the Major Professor before the final oral examination be scheduled and before copies of the thesis/dissertation are distributed to the modern of the Examining Committee.

After the "Preliminary Approval Sheet" has besigned, it should be submitted to the Dean of Graduate Programs before the final examination in the Graduate Programs before the final examination is prepared for final approximation of the thesis is sertation in its final form rests with the Examining Committee.

List of Core Courses	
EVSC 0500	BIOSTATISTICS I. CR. 3. Statistical methods in socific research. An introductory course in statistics dealing with the application of various methods of analyzing research data to include sampling, randomization, normal distribution, "t" test, linear regression, correlation, Chi-Square, analyssis of variance of random design.  Laboratory assignments require the use of ptocade ulators and the University's time share computer.
EVSC 0501	BIOSTATISTICS II. CR. 3. The application of sadnced statistical methods in analyzing biological data to include analysis of two-way experiments, factorial experiments, covariance analysis, lessantare analysis with unequal subclassabers and curvilinear regression. Laboratory assignments ire the use of the University time share computer and departmental microcomputers.  Prerequisites: EVSC 0500 or Permission of Instructor
MBIO 0660	BIOMEDICAL STATS. CR. 3. The conceptual and thretical bases of biomedical research designs are examined. Appropriate stical methods, which correspond to and are consistent with the biomedical research design, will be studied. These include both parametric and nonparametric methods. Design statistics, probability distributions,

search, issues with co <b>g</b> lytriviolation, plagiarism, interpretation of ng other academic requirements including discussions on basic
and a review of current research topics. Oral presentations are and/o
DICAL SCIENCES . CR. 1. This is a seminar course. The
o present a seminar toatablut his / her research work or a project or. This course teasoffine techniques to prepare and present a
OBIOLOGY . CR. 1. This is a seminar course. The student is
a seminar to talk athist/ her research work. This course teaches epare and present a professional seminar in public.
EDICAL SCIENCES . CR. 1. This is a seminar course. The
present a seminarltoataout his / her research work. This course
ues to prepare and present a professional seminar in public.
HOBIOLOGY/THESIS . CR. 5. This course deals with specific
ects under the superv <b>isfioln</b> e graduate student's major professor.
expected to enrolaitotal of 6 credit hours, conduct research and
MEDICAL SCIENCES/THESIS. CR. 5 This is a required
give time for the studenwrite their thesis work in the format
uate school.
List of Elective Courses
. CR. 4. This course deals with a topographic and systemic
canine, feline speciesc the domestic bird. Emphasis is placed
the dog & cat cadavers. Prosections, plastinated specimens, videos
d as instructional aids
. CR. 4. The course includes (2 lectures one hour each and 2 labs

	importance in animals. Emphasis is placedhe identification of parasites and the diagnosis of parasitic diseases.
MBIO 411G	MICROBIOLOGY . CR. 3. This course covers the basic properties of viruses in relatio to their roles as disease-causing agents. Emploidistize on a systematic review of virus families that cause diseases in domestic animals.
MBIO 413G	IMMUNOLOGY . CR. 3. This course deals with the structure, function, and kinetics of immune responses in relation to infectious oplastic, allergic, immunodeficiency, and autoimmune diseases. Initially the studenits by exposed to basic and fundamental aspects of the immune system requisite: MBIO 0411
MBIO 414G	IMMUNOLOGY/VIROLOGY LAB. CR. 1. This laboratory course covers general laboratory for the didactic lectures of Virology (MBIO 412) and Immunology (MBIO 413). Participants will have the opportunity the ingeneral understating of principals and objectives of diagnostic methods/inology and Immunology, collection, packaging and transport of specimens, immunological disorders including tests for autoimmune, hypersensitivity, and immunodeficiency conditions.
MBIO 412G	VIROLOGY. CR. 2. This course deals with the basimcepts and principles of viruses and viral infections. Emphasis is placed on viral agents basic, clinical and practical importancePrerequisite: MBIO 0411
PATH 0669	RISK ANALYSIS. CR. 3. This course will present an integrated approach to risk analysis composed of risk assessment, makagement and risk communication. It will rely upon a detailed analytic understand the epidemiology of a population under study and expertise in mathematical/states and computer modeling methods. The course will emphasize both stochastico (prabilistic) and deterministic modelling undergirded by sound epidemiologic concepts of population dynamics. Rigorous examination of transmission pathways stragents and multiple determinants that affect these interactions will be evaluated quantified mathematically and statistically with emphasis on probability distributions. Bequalitative and quantitative risk analysis methods will be examined. Quantitative restalysis (QRA) including probabilistic methods with emphasis on scenario analyssis (QRA) including probabilistic methods with emphasis on scenario analyssis (QRA) including probabilistic methods with emphasis on scenario analysis, sequence analysis, cost benefit analysis, optimization methods and a variety of states methods will be explored. Monte Carlo simulation, @RISK, Microsoft Excel and other risk analysis and modeling software as well as statistical/mathematical programs will be used.
IBSC 0603	BIOCHEMISTRY I . CR. 4. IBS course development-