COURSE DESCRIPTION

ACADEMIC CENTER **ROBERTO ALCÂNTARA GOMES BIOLOGY INSTITUTE**	DEPARTMENT **DEPARTMENT OF ANATOMY**		
COURSE NAME **UNBIASED STEREOLOGY**	( ) CORE COURSE ( ) OPTIONAL COURSE	HOURS 60	CREDITS 4

PROGRAM / PROJECT NAME **PHYSIOPATHOLOGY AND SURGICAL SCIENCES** Key Focus Area: Urogenital System Operative technique and Experimental Surgery	DISTRIBUTION OF HOURS		
	TYPE OF CLASS	HOURS	NO. OF CREDITS
	THEORETICAL	45	3
	PRACTICAL	15	1
	TOTAL	60	4

PREREQUISITES	(X) Master's program course (X) Doctorate's program course

COURSE DESCRIPTION

This course aims to provide basic knowledge that allows graduate students to understand and use quantitative methods in their thesis projects. The following topics will be addressed in a theoretical and practical way in equipment:

Morphometry: macroscopic measurements, determination of the weight and volume of an organ, linear measurements in the optical microscope. Determination of areas, correction of retraction and compression of tissues. Determination of the increase in photomicrographs. Analysis and presentation of quantitative results.

Allometry: bivariate, graphic adjustment, methodological premises. Multivariate allometry.

Stereology: stereological terminology, the test systems. Anatomical reconstruction. Sample size, AUI cuts. Stereological parameters: Vv, Sv, Nv, etc. New stereology: Orientator, Disector, Fractionator, weighted average nuclear volume.

BASIC BIBLIOGRAPHY

1. Aherne WA, Dunnil MS. Morphometry. Arnold, London, 1982.
2. Elias H, Hyde DM. A Guide to Practical Stereology. Karger, New York, 1983.
3. Howard CV, Reed MG. Unbiased stereology. Three-dimensional measurement in microscopy. Springer, New York, 1998.
4. Mandarim-de-Lacerda CA. Métodos Quantitativos em Morfologia. EdUERJ, Rio de Janeiro, 1995.
5. Weibel ER. Stereological Methods. Practical methods for biological morphometry. vol 1. Academic Press, London, 1979.

PROGRAM / PROJECT COORDINATOR

DATE	SIGNATURE