

**INTERAMERICAN UNIVERSITY OF PUERTO RICO
METROPOLITAN CAMPUS
FACULTY OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF NATURAL SCIENCES**

Syllabus

I. OVERVIEW

Course Title:	Integrative Seminar in Biopsychology
Course code and number:	BIPS 4900
Credits:	3
Academic Term:	
Professor:	
Office Hours:	
Office Phone:	(787) 250-1912
Email:	@intermetro.edu

II. DESCRIPTION

Integration of the knowledge and skills acquired in the courses of the program. Analysis of cases and research of topics of interest in biopsychology. It requires the presentation of written and oral works. Requirement: Have passed 30 credits in courses of the concentration in Biopsychology.

III. OBJECTIVES

It is expected that, at the end of the course, the student will be able to:

1. Integrate information from the area of Biopsychology from different sources of information.
2. Analyze research work in the area of Biopsychology supported by evidence, examples, and informed explanations
3. Develop a research project that meets the standards of the disciplines of natural sciences and behavioral sciences.

The program is designed to develop the competencies that allow the student:

Competencies of the graduate's profile

Knowledge

1. Demonstrate basic knowledge of concepts, principles and theories related to biology and psychology.
2. Integrate information from multiple sources in biology and psychology relevant to the study of human behavior problems.

Skills

1. Apply scientific models or processes in the solution of problems related to the study of biopsychology.

Attitudes

1. Demonstrate ability to make and implement informed and responsible ethical decisions.
2. Recognize how decisions affect and are affected by other individuals separated in time, space, and culture.

IV. THEMATIC CONTENT

The study of the following areas related to the field of Biopsychology is recommended:

1. Complexity in Biological Systems
2. Adaptations and animal behavior
3. Comparative Evolution
4. Cerebral Phylogeny
5. Brain Ontogeny
6. Cognitive Neuroscience
7. Social Neuroscience
8. Affective Neuroscience
9. Neuroplasticity
10. Neuropharmacology
11. Neuroimmunology
12. Emerging Topics in Biopsychology

V. CALENDAR

It will be discussed in class and a copy will be placed on Blackboard.

It is important that you fill out the Acknowledgment of Syllabus's Receipt in Blackboard.

VI. ACTIVITIES

- A. Conferences
- B. Group presentations
- C. Discussion of assigned readings
- D. Literature review work
- E. Oral Presentations
- F. Case Studies
- G. Debates

VII. EVALUATION

The evaluation of the course will be based on the execution of the partial exams, final exam, group presentation and the laboratory.

The final grade will be calculated on a 100% basis as follows:

Component	Description
Research Work- Oral Presentation	100 points
Course topic monograph	100 points
Attendance* and participation	100 points
Summary Scientific Article	<u>100 points</u>
	TOTAL 400 points

VIII. SPECIAL NOTES

A. Ancillary services or special needs

Any student who requires auxiliary services or special assistance must request them at the beginning of the course or as soon as they acquire knowledge that they need them, through the corresponding registration, in the Orientation Office with Dr. María de los Ángeles Cabello, Coordinator of services to students with disabilities, office 111, ext. 2306.

B. Honesty, fraud and plagiarism

Dishonesty, fraud, plagiarism and any other inappropriate behavior in relation to academic work constitute major infractions sanctioned by the General Student Regulations. Major infractions, as provided for in the General Student Regulations, may result in the suspension of the University for a defined period of more than one year or the permanent expulsion from the University, among other sanctions.

C. Use of electronic devices

Cell phones and any other electronic device that could interrupt teaching and learning processes or alter the environment conducive to academic excellence will be deactivated. Pressing situations will be addressed, as appropriate. The handling of electronic devices that allow access, storage or sending data during evaluations or exams is prohibited.

D. Compliance with the provisions of Title IX

The Federal Higher Education Act, as amended, prohibits discrimination on the basis of sex in any academic, educational, extracurricular, athletic, or any other program or employment, sponsored or controlled by an institution of higher education regardless of whether it is conducted on or off the institution's premises, if the institution receives federal funds.

In accordance with current federal regulations, our academic unit has appointed a Title IX Assistant Coordinator who will provide assistance and guidance regarding any alleged incident constituting discrimination based on sex or gender, sexual harassment or sexual assault. You can contact the Assistant Coordinator at the telephone Mr. George Rivera, extension 2262 or 2147, or email griverar@metro.inter.edu.

The Normative Document entitled **Norms and Procedures to Address Alleged Violations of the Provisions of Title IX** is the document that contains the institutional rules to channel any complaint that is filed based on this type of allegation. This document is available on the website of the Inter-American University of Puerto Rico

IX. BIBLIOGRAPHY

Textbook: Due to the nature of the course, no textbook will be required Supplementary Readings

- Neuroplasticity:
<https://www.nichd.nih.gov/about/overview/50th/discoveries/Pages/neuroplasticity>
(retrieved: February, 2015)
- Neurotransmitter and Cell Death: <http://neuroscience.uth.tmc.edu/s4/chapter12.html>
(retrieved: February, 2015)
- Learning and Memory: <http://neuroscience.uth.tmc.edu/s4/chapter07.html> (retrieved: February, 2015)

Suggested books:

- Kalat J. 2015. Biological Psychology. 12E. Wadsworth Publ. New York.
- Urry, L. A., M. L. Cain, S. A. Wasserman, P. V. Minorsky, R.B. Jackson, J.B. Reece. (2014). Campbell Biology in Focus. Pearson Education, Inc.
- Neuroscience: Exploring the Brain. Hardcover – March 17, 2015 by Mark F. Bear
PhD (Author), Barry W. Connors PhD (Author), Michael A. Paradiso PhD (Author) & 0 more Fourth, North American Edition ISBN-13: 978-0781778176 ISBN-10: 0781778174
- Papini, M.R. (2011). Comparative Psychology: Evolution and Development of Behavior, 2nd Edition. Psychology Press.
- Breedlove M and Watson N. 2010. Biological Psychology: An Introduction to Behavioral, cognitive and Clinical Neuroscience. Sunderland, MA
- Klein SB and Thorne BM. 2006. Biological Psychology. Worth Publishers. McMillan Higher Ed. NY
- Pinel J. 2013. Biopsychology Plus NEW MyPsychLab with eText -- Access Card Package, 9/E – Pearson, NY
- Freberg L. (2014). Discovering Behavioral Neuroscience: An introduction to biological psychology. Cengage Learning: Boston.
- Domjan, M. (2011). The principles of learning and behavior. 7th. Edition. Cengage Learning.
- Kesner, R.P. (2014). Neurobiology of Comparative Cognition. DS Olton.
- Rajecki, D.W. (2014). Comparing Behavior: studying man studying animals.
Psychology Press.

- Vonk, J. and Shackelford, T.K. (2012). *The Oxford Handbook of Comparative Evolutionary Psychology*. Oxford University Press: New York.
- Carlson, N.R. (2006). *The Physiology of Behavior*, 9th Edition. Allyn and Bacon Publishers: Boston, Massachusetts
- Watson, N.V. and M.R. Rosenzweig, M.R. (2010). *Biological Psychology*. Sixth Edition. S.M. Breedlove: New York.
- Bear, M.F., Connors, B.W. and Michael A. Paradiso (2015). *Neuroscience - Exploring the Brain*, 3rd Edition.
- Kolb, B. and Whishaw, I. Q. (2006). *An Introduction to Brain and Behavior: Chapter 2: How is the Brain organized?*
- Lyons, M., Harrison, N., Brewery, G. and R. Sanders (2014). *Biological Psychology. Learning Matters*.
- Church land, Patricia Smith. 1989. *Neurophilosophy: Toward a Unified Science of the Mind-Brain*. Cambridge: Massachusetts Institute of Technology.
- Bickle. John. 2009. *The Oxford Handbook of Philosophy and Neuroscience*. Oxford: Oxford University Pres
- McLaughlin, Brian P.; Beckermann, Ansgar and Walter, Sven. 2008. *The Oxford Handbook of Philosophy of Mind*.
- Belichon Carmona, Mercedes; Igoa González, José and Rivière Gómez, Ángel. 1996. *Psychology of language: Research and theory*. 3rd Edition. Madrid: Editorial Trotta.
- Armony, Jorge and Vuilleumier. 2013. *The Cambridge Handbook of Human Affective Neuroscience*. Cambridge: Cambridge University Press.
- Corr, Philip J. 2006. *Understanding Biological Psychology*. Malden: Blackwell Publi

Magazines:

- Ebert, B., Wafford, KA. & Deacon, S (2006). Treating insomnia: current and investigational pharmacological approaches. *Pharmacological Therapeutics* 112(3):612-629.
- Greenberg, G., Partridge, T., Weiss, E. and Wojciech Pisula, (2003). Comparative psychology: a new perspective for the 21st century. *Developmental Psychobiology*. Vol. 44, Num. 1.
- Vonk, J. and Shackelford, T.K. (2012). *The Oxford Handbook of Comparative Evolutionary Psychology*. Oxford University Press: New York.

Electronic resources:

The student can visit the following electronic pages. Access to the pages was made in February, 2015

- Frontiers in neuroanatomy - <http://www.ncbi.nlm.nih.gov/pmc/journals/641/>
- Nervous system in general - <http://www.innerbody.com/image/nerv05.html>
- Central Nervous System - Visual Perspectives
<http://cnsvp.stanford.edu/about/index.html>
- Atlas of plant and animal histology: animal organs, nervous system Pilar Molist, Manuel A. Pombal, - <http://webs.uvigo.es/mmegias/inicio.html>.
- www.pubmed.gov
- Journal of Comparative Psychology - https://escolarship.org/uc/uclapsych_ijcp
- Comparative Psychology and Ethology-APA Divisions - www.apadivisions.org
- Animal Behavior and comparative Psychology-CUNY- www.gc.cuny.edu
- Comparative Psychology-Science Daily - www.sciencedaily.com/
- Animal Behavior Institute- www.animaledu.com/
- Neuroscience and Animal Behavior psychology. <https://www.emory.edu/nab/>
- Animal Behavior Program - [www.bucknell.edu/animal behavior](http://www.bucknell.edu/animal%20behavior)

NOTE: THE PAST RECORD MAY BE SUBJECT TO CHANGE AS UNDERSTOOD BY THE PROFESSOR.