

**INTERAMERICAN UNIVERSITY OF PUERTO RICO  
SCIENCE AND TECHNOLOGY FACULTY  
NATURAL SCIENCES DEPARTMENT  
BS PROGRAM IN BIOPSYCHOLOGY**

**SYLLABUS**

**I. GENERAL INFORMATION**

Course Title	:	Integrative Seminar in Biopsychology
Code and Number	:	<b>BIPS 4900</b>
Credits	:	Three (3)
Academic Term	:	
Professor	:	
Office Hours	:	
Office Phone	:	787-250-1912
Email	:	

**II. DESCRIPTION**

Integration of knowledge and skills acquired in the courses of the program. Case analysis and research of topics of interest in biopsychology. Requires the submission of written and oral papers. Requirement: Have passed 30 credits in courses of concentration in Biopsychology.

**III. OBJECTIVES**

1. Integrate information from the area of Biopsychology from different sources of information.
2. Analyze research works in the area of Biopsychology supported with 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 enable you to student:**

**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. CONTENT**

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

- A. Complexity in Biological Systems.
- B. Adaptations and animal behavior.
- C. Comparative Evolution
- D. Cerebral phylogeny
- E. Ontogeny of the Brain
- F. Cognitive Neuroscience
- G. Social Neuroscience
- H. Affective Neuroscience
- I. Neuroplasticidad
- J. Neuropharmacology
- K. Neuroimmunology
- L. Emerging Issues in Biopsychology.

**V. ACTIVITIES**

The activities to be used for the development of the course are the following:

1. Oral Presentations
2. Written Works
3. Student Participation
4. Case Studies
5. Group work
6. Assignments
7. Debate

## VI. EVALUATION

The evaluation of this course includes:

	<b>Punctuation</b>	<b>% of Final Grade</b>
Research Work-Oral Presentation	100 points	35%
Research Work-Monograph	100 points	35%
Participation in Classes	100 points	10%
Scientific Article Abstract	100 points	20%
<b>Total</b>	<b>400</b>	<b>100</b>

## VII. SPECIAL NOTES

### A. Auxiliary Services or Special Needs

All students who require auxiliary services or special assistance must request these at the beginning of the course or as soon as they know that they need them through the proper registry in the Office of the Coordinator of Services to Students with Disabilities, Dr. María de los Angeles Cabello, located in the Counseling Program, Room 419, on the fourth floor of the John Will Harris Building, 787-250-1912, extension 2306.

### B. Honesty, fraud, and plagiarism

Dishonesty, fraud, plagiarism, and any other inappropriate behavior with academic work constitute major infractions sanctioned by the General Student Regulations. The major infractions, as stated in the General Student Regulations, may consequently be suspension from the University for a definite period greater than one year or permanent expulsion from the University, among other sanctions.

### C. Use of electronic devices

Cellular telephones and any other electronic device that could interrupt the teaching and learning processes or alter the environment leading to academic excellence will be deactivated. Any urgent situation will be dealt with, as appropriate. The handling of electronic devices that allow students to access, store, or send data during evaluations or examinations is prohibited.

### D. Compliance with the Provisions of Title IX

The Federal Higher Education Act, as amended, prohibits discrimination because of sex in any academic, educational, extracurricular, and athletic activity or in any other program or function, sponsored or controlled by a higher education institution, whether it is conducted within or outside the property of the institution if the institution receives federal funds.

In harmony with current federal regulations, in our academic unit an Assistant Coordinator of Title IX has been designated to offer assistance and orientation in relation to any alleged incident constituting discrimination because of sex or gender, sexual harassment, or sexual aggression. The Assistant Coordinator, Mr. George

Rivera, can be reached by phone at (787) 250-1912 extension 2147, or by e-mail at [grivera@metro.inter.edu](mailto:grivera@metro.inter.edu).

The Normative Document Titled Norms and Procedures to Deal with Alleged Violations of the Provisions of Title IX is a document that contains the institutional rules to direct any complaint that appears to be this type of allegation. This document is available on the Web site of the Inter-American University of Puerto Rico ([www.inter.edu](http://www.inter.edu)).

## VIII. EDUCATIONAL RESOURCES

**Textbook:** Due to the nature of the course no textbook will be required.

Further reading

Neuroplasticity:

<https://www.nichd.nih.gov/about/overview/50th/discoveries/Pages/neuroplasticity.aspx#finding> (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> (Recovered: February 2015)

Audiovisual Resources

Electronic Resources

## IX. BIBLIOGRAPHY OR REFERENCES

### 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 Ph.D. (Author), Barry W. Connors Ph.D. (Author), Michael A. Paradiso Ph.D. (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*, 2<sup>nd</sup> Edition. Psychology Press.

Breedlove, M. & Watson, N. 2010. *Biological Psychology: An Introduction to Behavioral, cognitive, and Clinical Neuroscience*. Sunderland, MA.

Klein, S. B & Thorne, B. M. 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. y 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. & Michael A. Paradiso (2015). *Neuroscience - Exploring the Brain*, 3rd Edition.

Kolb, B. & Wishaw, I. Q. (2006). *An Introduction to Brain and Behavior: Cap. 2: How is the Brain organized?*

Lyons, M., Harrison, N., Brewery, G. & 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, J. 2009. *The Oxford Handbook of Philosophy and Neuroscience*. Oxford: Oxford University Press.

McLaughlin, Brian P.; Beckermann, Ansgar and Walter, Sven. 2008. *The Oxford Handbook of Philosophy of Mind*.

Belichon Carmona, Mercedes; Igoa González, José & 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. & Wojciech Pisula, (2003). Comparative psychology: a new perspective for the 21<sup>st</sup>. century. *Developmental Psychobiology*. Vol. 44, Núm. 1.

Vonk, J. & Shackelford, T. K. (2012). *The Oxford Handbook of Comparative Evolutionary Psychology*. Oxford University Press: New York.

### **Electronic resources:**

The student can visit the following websites. The pages were accessed in February 2023.

- Frontiers in neuroanatomy - <http://www.ncbi.nlm.nih.gov/pmc/journals/641/>
- The 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](http://www.pubmed.gov)
- Journal of Comparative Psychology - [https://escolarship.org/uc/uclapsych\\_ijcp](https://escolarship.org/uc/uclapsych_ijcp)
- Comparative Psychology and Ethology - APA Divisions - [www.apadivisions.org](http://www.apadivisions.org)
- Animal Behavior and Comparative Psychology – CUNY - [www.gc.cuny.edu](http://www.gc.cuny.edu)
- Comparative Psychology-Science Daily - [www.sciencedaily.com/](http://www.sciencedaily.com/)
- Animal Behavior Institute- [www.animaledu.com/](http://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)

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