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| ***NW NOGGIN- MESA Neuroscience Program*** |  |  |
| VSCI 101, VUB 100  Monday-Thursday 9:00 to 11:00 a.m. |
| Summer 2015 |
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**I. Basic Information**

* Bill Griesar, Ph.D., NWNoggin Neuroscience coordinator, griesar@pdx.edu
* Jeff Leake, MA, NWNoggin Art coordinator, aspragus@yahoo.com

**II. Course Description**

Through experiential learning and discussion, emphasis will be placed on knowledge of Neuroscience. Specifically, focus will be given to Major Brain Structures, Neurons, Nervous Systems and Networks, Action Potentials & Neurotransmitters, Memory, Drugs effect on the brain, Vision, Speech & Hearing.

**III. Format**

This class will include lecture, discussion, in-class activities, and integrated art projects. Fun and engaging in-class activities are an integrated part of this course meant to reinforce learning and encourage class participation. Students are encouraged to ask questions and think of their own questions they would like to discuss in class.

**IV. Course Policies**

**Class Rules- For Your Safety**

* No rough play at any given time
* All food and water must remain outside of the lab
* Close shoes must be worn at all times while in the lab
* Wear clothes appropriate for a lab setting
* Listen to all instructions when engaging in activities
* Have fun!

**V. Course Content**

By the end of successful completion of this course students will achieve the following:

Course Objectives:

* Gain knowledge of major brain structures and their functions
* Gain knowledge of neurons, their function and relationship to everyday learning and activities
* Understand the process of brain “communication”
* Gain knowledge and understand the process of learning and memory
* Gain knowledge and understanding of sensation and perception
* Gain knowledge and understanding in basic fundamentals of Neuroscience

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| **Class** | **Date** | **Course Content** |
| 1 | 7/13 | Major Brain Structures |
| 2 | 7/14 | Neurons |
| 3 | 7/15 | Nervous Systems and Networks |
| 4 | 7/16 | Assessments (computer lab)  Brain Basics Review  **Human Brains** |
| 5 | 7/20 | Action Potentials & Neurotransmitters  **Human Interface Game** |
| 6 | 7/21 | Memory |
| 7 | 7/22 | Drugs  **Demo of MyBrain application** |
| 8 | 7/23 | WSUV lab tours  Assessments (computer lab) |
| 9 | 7/27 | Vision |
| 10 | 7/28 | Speech & Hearing |
| 11 | 7/29 | Touch, taste & smell  **Human Brain** |
| 12 | 7/30 | Sheep Brains  Assessments (computer lab) |