



Principles of Neuroscience I – Organization and Development of the Nervous System

GMS 6021

This two credit, fully on-line semester course will provide you with an understanding of the fundamental processes underlying normal brain development. Questions you will be able to answer at the end of this course include:

- How and where does the nervous system originate?
- How are the cells that constitute the nervous system generated?
- How do progenitor cells know which type of cell to become?
- How do newly born neurons reach their appropriate locations in the brain?
- How do maturing neurons form the correct synaptic connections with other neurons?
- What are the consequences of disrupted brain development?

This course is organized into ten learning modules, each of which covers a key area in Developmental Neuroscience. Each module includes 2-6 units containing short lectures and reading assignments from a required textbook. Your mastery of the module material will be assessed using self-check quizzes and module tests. In addition to the unit quizzes and module tests, you will participate in two Beyond the Basics units in which you will apply your understanding of course materials to discussions of current news topics.