April 18, 2006

Program Plan For Information Literacy

Major Program: Department of Physiology and Neurobiology (PNB)

For PNB majors, information literacy will be a specific focus of seven courses:

PNB 252: Physiological Model Systems: Problem solving, and written critiques of published journal articles.

PNB 263W: Investigations in Neurobiology: Emphasis on designing and carrying out independent research projects, and communicating the results.

PNB 280: Molecular Neuroanatomy: Give oral and written critiques of research articles.

PNB 281: Molecular Physiology of the Heart: Reading and writing assignments from primary literature; PubMed searches.

PNB 292W: Senior Research Thesis in Physiology and Neurobiology: Involves research and writing a thesis based on laboratory research carried out by the student.

PNB 298, 299: Special Topics and Independent Study: Involves research and literature review on a specific research topic.

STANDARDS ONE and TWO: The information literate student determines the nature and extent of the information needed. The information literate student accesses needed information effectively and efficiently.

- Faculty and library staff will teach students about the information sources available through the University Libraries and the Internet with a focus on databases used in Physiology & Neurobiology (e.g., PubMed, S.C.I., Web of Science, Medline, etc.). They will learn effective strategies for utilizing these search engines such as selection of appropriate keywords, key authors, and journal titles.
- Students will learn to identify and utilize respected general periodicals, such as Science and Nature, to develop and maintain awareness of current scientific issues and topics.
- Students will use primary peer-reviewed literature to investigate subjects.

STANDARD THREE: The information literate student evaluates information and its sources critically and incorporates selected information into his/her knowledge base and value system.

• Students will learn how to differentiate between legitimate information sources and sources whose validity cannot be judged. They will acquire an understanding the process of peer-reviewed (refereed) literature and how it impacts upon the reliability of the information presented, compared to non-refereed publications and sources. They will also learn how to identify reliable and appropriate sources on the internet and how to assess the currency of the information.

STANDARD FOUR: The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.

- Students will learn organizational skills that will focus their attention and increase the effectiveness of information searching and retrieval. They will also learn how to store the information retrieved for use on their projects.
- The information will be used to supplement lecture and discussion topics, to develop research plans, to write lab reports, theses and prepare oral presentations.

STANDARD FIVE: The information literate student understands many of the economic, legal and social issues surrounding the use of information and accesses and uses information ethically and legally.

• Students will receive information on the principles of intellectual property rights including proper techniques for citation and attribution of sources.