האוניברסיטה העברית בירושלים THE HEBREW UNIVERSITY OF JERUSALEM



Syllabus

BRAIN AND BEHAVIOR FOR PSYCHOBIOLOGY STUDENTS - 51109

Last update 03-07-2016

HU Credits: 2

Responsible Department: psychology

Academic year: 0

Semester: Yearly

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Prof. Raz Yirmiya

<u>Coordinator Email: raz.yirmiya@mail.huji.ac.il</u>

Coordinator Office Hours: Sunday 15:30-16:30

Teaching Staff: Prof Raz Yirmiya

Course/Module description:

In this course, students will be introduced to the scientific process and its academic scientific end product [] the scientific publication. During the course, students will search, read, understand, evaluate, critic and present in class scientific publications in various topics within the field of Psychobiology.

Course/Module aims:

The main aim of the course is to enable students to get experience in searching for, reading, understanding and presenting scientific papers, via intensive structuring and supervision of these activities by the teacher. The course will prepare students to be able to independently find and understand scientific papers throughout their studies in the Department of Psychology.

Learning outcomes - On successful completion of this module, students should be able to:

At the end of the course students will be able to:

Search effectively for papers in specific subjects in the various search engines and databases.

Evaluate and decide during the search (based on content and bibliometric parameters) which papers are more or less central/important and merit further reading and focusing.

Define, identify, and understand the background, rational, methods, findings and conclusions of scientific publications.

Briefly summarize in an abstract the main aspects of a paper (introduction, methods, results, and discussion), taking into account primary versus secondary findings.

Create a presentation addressing the main aspects of papers and present it in class.

Identify, explain and justify which prior publication(s) led the authors of a particular paper to ask the research questions raised in that paper.

Based on the aforementioned point, chronologically describe and present in class the developmental history of a specific research question over several decades of research in that area.

Attendance requirements(%):

Full attendence is required. Besides emergencies, please notify in advance if you have to miss class

Teaching arrangement and method of instruction: The first three classes will be based on frontal lectures by the lecturer and class discussions. During these meetings the students will be introduced to the scientific process of research, from writing grants to publishing papers (including experimental, review papers as well as chapters in edited books), as well as to the basic structure of experimental scientific papers and the process of searching for papers in particular research areas. The remaining meetings will be devoted to students[] presentations and discussions as detailed in the next part (course structure). During the whole year, each student and group of students will meet with the lecture to prepare and discuss their ongoing work.

Course/Module Content:

Following the initial three lessons in which the lecturer will introduce the structure and aims of scientific writing and the search methods for scientific publications, the course will continue with the following tasks:

Task #1: Prior to each class, students will read a review paper in a specific area of Positive Psychology from a leading source.

Task #2 Students will form groups of 4 students each, which once during the course will be responsible for leading the discussion in class by preparing 10-20 questions for discussion regarding the various aspects of the paper, including questions regarding integration and comprehension. General questions may be asked such as: What is the main scientific question that the authors are trying to answer? How did this question come about historically as mentioned in the Introduction? What are the current research directions?

What research methods are being used? What are the implications/contributions of this study to the field? What are the next suggested steps in the paper? And what other suggestions are appropriate? The time frame for this group activity leading the class discussion is 30 minutes.

Task # 3: In addition to leading the 30-minutes group discussion, each one of the 4 group members will choose one scientific paper that is related to the review paper and present it (10 minutes per student). Presentations will address the Introduction, Methods, Results and Discussion sections of the paper.

Task # 4: Writing a paper and presenting it in class. The final task will be also conducted in groups of 4 students, who will choose one scientific paper from a leading journal in the field and track the historical roots of that study, according to the following steps.

a. The group will summarizing the paper in terms of its scientific questions/issues, main methods and findings (no need to summarize ALL findings, just the main ones), and will add 2-3 sentences regarding it conclusions and contributions (a maximum of $\frac{1}{2}$ of a page).

b. The next step is to choose from the reference list, the ONE study that contributed the most to the current one. The group will explain and justify yjeir choice of this paper as the ONE study with the greatest contribution/influence to the rational/research question of the new study.

The group will find this paper and summarize it, repeating steps a and b above. The groups will continue with this process until reacingh the earliest possible original paper that set the stage for this research line. If the historical roots are especially []antique[] you may want to read about it in a book or an encyclopedia, otherwise only experimental papers (not reviews) are required. After reaching the historical roots and summarizing the various papers as described in a and b, the group will provide an integrative summary of the development of the scientific idea that led to the most recent (the first) publication (no more that $\frac{1}{2} - \frac{3}{4}$ of a page at the most. A graphical representation of this stage is adviseable). You will need to submit hard copies of the publications. Your presentation should describe this process and content

Required Reading:

The list of review papers for the first task will be provided in the beginning of the semster.

Additional Reading Material:

Course/Module evaluation: End of year written/oral examination 0 % Presentation 40 % Participation in Tutorials 10 % Project work 50 % Assignments 0 % Reports 0 % Research project 0 % Quizzes 0 % Other 0 %

Additional information: