**AL-FARABI KAZAKH NATIONAL UNIVERSITY**

**THE FACULTY OF PHILOSOPHY AND POLITOLOGY**

**Education program of specialty “6M050300 - Psychology”**

# Approved

At Academic council of faculty

The report №1

 24.10 .2018

**the dean’ of faculty**

Doctor of philosophy, professor,

Massalimova A.R.

 **SYLLABUS**

**Modules of Individual Educational Paths**

# RESEACH METHODS AND EXPERIENCE

1 course, 3 credits, elective course

***Lecturer and Practical studies:*** Candidate of psychological sciences, Khussainova I.R.

Tel: +77019990979

**e-mail:** ilmirax@mail.ru

▪ **The brief description of the course:**

 This course is primarily designed to expose master students to the core ideas behind research methods in psychology; the major components of designing research in psychology will be addressed. An additional goal of this course is for master students to develop the ability to conduct their own research.

▪ **The purpose of the course:** A purpose of this discipline is to develop a very hands-on, experience-based understanding of research in psychology. Toward this end, in addition to conducting master students' own research, it will be completed several laboratory exercises that will help them get a feel for underlying research in psychology. Also a final goal is to develop a basic understanding of statistics.

▪ **Results of study:** Upon completion of this course, you should be able to:

(1) To develop an ability to think critically about research

(2) To develop an understanding of how to design and conduct experiments

(3) To develop an understanding of how to analyse experimental results

(4) To develop an ability to clearly and concisely present scientific results

 ▪ **General competences:**

- **instrumental**: Ability to develop new methods of research of the psychological phenomena on the basis of the available; Ability to model new psychotechnologies in the field of psychological practice. Ability to the analysis and synthesis, ability to the organization and planning.

* **Interpersonal:** Ability to make of experience use of world psychological community in carrying out scientific researches, modeling of new psychotechnologies; Ability to correctly formulate the point of view, to respect opinion of others. Ability to work in the international context;

- **System:** Ability to develop available psychological knowledge also is system to supplement with new researches forming complete, complete idea of this scientific problem; Ability to systematize the received knowledge and to define importance, first priority and the importance of one before others in a concrete research situation;

**- Subject competencies:** Ability to critically analyze and form an orientation of research process; Knowledge of serious experimental procedures, including data recording, the analysis and planning of psychological experiment.

**STRUCTURE, VOLUME AND CONTENT OF DISCIPLINE**

|  |  |  |  |
| --- | --- | --- | --- |
| **week** | **The theme**  | **Ours** | **Points**  |
| **Thematic block**  |
| 1 | Lecture 1. Research methods in psychology: Historical overview | 2 | 1 |
| Practical (laboratory) occupation 1. Basic scientific schools of psychology and their researches | 1 | 5 |
| Theme of Self-work 1. Make table of scientific researches topics in psychology | 1 | 6 |
| 2 | Lecture 2. Types and structure of experiment in psychology  | 2 | 1 |
| Practical (laboratory) occupation 2. Using measurement scales in psychological research | 1 | 5 |
| Theme of Self-work 2. Make table of research scales and dependent and independent variables | 1 | 6 |
| **Thematic block** |
| 3 | Lecture 3. Organizing the psychological research: variables, hypothesis and methods | 2 | 1 |
| Practical (laboratory) occupation 3. Basic requirements for research subjects  | 1 | 5 |
| Theme of Self-work 3. Create scheme of using research methods on the theme of your dissertation | 1 | 6 |
| 4 | Lecture 4. Creation and adaptation of new psychological method | 2 | 1 |
| Practical (laboratory) occupation 4. Standardization, reliability and validity of new method | 1 | 5 |
| Theme of Self-work 4. Make a scheme of the psychological experiment on a subject of your dissertation with all details and conditions. |  | 6 |
| 5 | Lecture 5. The design of the experiment in psychology. | 2 | 1 |
| Practical (laboratory) occupation 5. Experimental forms of design and ways of their control | 1 | 5 |
| Theme of Self-work 5. Make list of new innovative research design |  | 6 |
| 6 | Lecture 6. Pilot research in psychology. | 2 | 1 |
| Practical (laboratory) occupation 6. Conditions of conducting the pilot research | 1 | 5 |
| 7 | Lecture 7. Data processing of psychological experiment | 2 | 1 |
| Practical (laboratory) occupation 7. Quantitative and qualitative data processing | 1 | 5 |
| **RC 1** |  | 15 |
| **Rubic control** |  | **100** |
| **Thematic block** |
| 8 | Lecture 8. Data processing by SPSS | 2 | 1 |
| Practical (laboratory) occupation 8. The main functions and opportunities of using SPSS | 1 | 5 |
| Theme of Self-work 6. Create scheme of using SPSS within your dissertational study with the example  |  | 6 |
| 9 | Lecture 9. Modern computer technologies in psychological research | 2 | 1 |
| Practical (laboratory) occupation 9. Mistakes and restrictions in use of computer programs | 1 | 5 |
| Theme of Self-work 7. Develop the example of your own virtual technology of data collecting |  | 5 |
| 10 | Lecture 10. New research methods in Psychology: Psychological measurement using PSYLAB, MatLab, Neuron-Spectrum and etc.  | 2 | 1 |
| Practical (laboratory) occupation 10. Critics of using innovative methods and techniques | 1 | 5 |
| Theme of Self-work 8. Article review: Experimental researches in psychology using innovative technology | 1 | 5 |
| 11 | Lecture 11. Generalization and interpretation of research results  | 2 | 1 |
| Practical (laboratory) occupation 11. Forming the conclusion of psychological research | 1 | 5 |
| Theme of Self-work 9. Make table of forms of representation of research results |  | 5 |
| 12 | Lecture 12. Psychophysiological researches and their structure | 2 | 1 |
| Practical (laboratory) occupation 12. Innovative research methods of the brain | 1 | 5 |
| Theme of Self-work 10. Article review on the theme: Psychophysiology and psychosomatics |  | 6 |
| **Thematic block** |
| 13 | Lecture 13. Well-known psychological experiments met critics from the Ethical committee | 2 | 1 |
| Practical (laboratory) occupation 13. Steps of scientific paper publication (APA and European standards) | 1 | 5 |
| 14 | Lecture 14. Communication of the researcher and participants | 2 | 1 |
| Practical (laboratory) occupation 14. The researcher mistakes in the process of psychological research | 1 | 5 |
| 15 | Lecture 15. Ethics of experimental research in psychology | 2 | 1 |
| Practical (laboratory) occupation 15. Ethical principles of conducting research of British (BPS), American (APA) and Russian (RAO) psychological society | 1 | 5 |
| **RC 2** |  | 15 |
| Rubic control |  | **100** |
|  | **Examination** |  | **100** |
|  | **TOTAL** |  | **100** |

**Main Bibliography:**

1. Pashler, H. (Ed)(2002) *Stevens' Handbook of Experimental Psychology*; New York: Wiley
2. West, S. G., & Thoemmes, F. (2010). Campbell’s and Rubin’s perspectives on causal inference. Psychological Methods, 15(1), 18-37. [doi](http://en.wikipedia.org/wiki/Digital_object_identifier):[10.1037/a0015917](http://dx.doi.org/10.1037/a0015917)
3. Дружинин В.Н. Экспериментальная психология. СПб.,2000.
4. Анастази А. Психологическое тестирование. М.,1982.
5. 2. Годфруа Ж. Что такое психология? М.,1992.
6. 3. Готтсданкер Р. Основы психологического эксперимента. М.,1982.
7. Brewer, M. (2000). Research Design and Issues of Validity. In Reis, H. & Judd, C. (eds) Handbook of Research Methods in Social and Personality Psychology. Cambridge:Cambridge University Press.
8. McGuigan, F.J. (1997) Experimental Psychology: Methods of Research. New Jersey: Prentice-Hall.
9. Charness, G., Gneezy, U., & Kuhn, M. A. (2012). Experimental methods: Between-subject and within-subject design. Journal Of Economic Behavior & Organization, 81(1), 1-8.
10. Solso, Robert L. & MacLin, M. Kimberly (2001). *Experimental Psychology: A Case Approach* (7th ed.). Boston: Allyn & Bacon. [ISBN](http://en.wikipedia.org/wiki/International_Standard_Book_Number) [0-205-41028-6](http://en.wikipedia.org/wiki/Special%3ABookSources/0-205-41028-6).

**Additional Bibliography:**

1. Fleiss, J. L. (1986). Reliability of measurement. The design and analysis of clinical experiments, 1-32.
2. Sturm, T. & Ash, M.G (2005). Roles of instruments in psychological research. History of Psychology,8, 3-34.
3. Куликов Л.В. Психологическое исследование. СПб.,1994.
4. Ганзен В.А. Системные описания в психологии. Л.,1984.
5. Клайн П. Справочное руководство по конструированию тестов. Киев,1994.
6. Налимов В.В. Теория эксперимента. М.,1971.
7. Кун Т. Структура научных революций. М.,1983.
8. Поппер К. Логика и рост научного знания. М.,1983.
9. Лакатос И. Доказательность и опровержение. М.,1967.
10. Фейерабенд П. Избранные труды по методологии науки. М.,1986.
11. Levine, G., Parkinson, S (1994) *Experimental methods in psychology*. Hillsdale, NJ: Lawrence Erlbaum Associates.
12. Kline, R. B. (2004). Effect Size Estimation in Multifactor Designs. In , Beyond significance testing: Reforming data analysis methods in behavioral research (pp. 203-243). Washington, DC US: American Psychological Association. [doi](http://en.wikipedia.org/wiki/Digital_object_identifier):[10.1037/10693-007](http://dx.doi.org/10.1037/10693-007)

|  |  |  |  |
| --- | --- | --- | --- |
| Letter equivalents of Points  | Number equivalents of Points | %  | Classical grade system |
| А | 4,0 | 95-100 | Excellent  |
| А- | 3,67 | 90-94 |
| В+ | 3,33 | 85-89 | Good  |
| В | 3,0 | 80-84 |
| В- | 2,67 | 75-79 |
| С+ | 2,33 | 70-74 | Satisfied  |
| С | 2,0 | 65-69 |
| С- | 1,67 | 60-64 |
| D+ | 1,33 | 55-59 |
| D- | 1,0 | 50-54 |
| F | 0 | 0-49 | Not satisfied  |
| I (Incomplete) | - | - | Incomlete*(not available for GPA)* |
| P (Pass) | **-** | **-** | «Pass»*(not available for GPA)* |
| NP (No Рass) | **-** | **-** | «No Рass»*(not available for GPA)* |
| W (Withdrawal) | - | - | «Withdrawal»*(not available for GPA)* |
| AW (Academic Withdrawal) |  |  | Academic Withdrawal*(not available for GPA)* |
| AU (Audit) | - | - | «Audit»*(not available for GPA)* |
| certified |  | 30-6050-100 | certified |
| Not certified |  | 0-290-49 | Not certified |
| R (Retake) | - | - | Retake  |

Considered and recommended at the meeting of General and Applied Psychology On 24.10.2018

Head of the Department Z.B.Madalieva

Lecturer Khussainova I.R.