

SUBJECT SHEET

**Subject: GENERAL RESEARCH METHODS AND SCIENTIFIC PAPER PREPARATION
METHODOLOGY**

Holder of course activities: Prof. dr. Octavian Popescu

Year of study: **I**

| Number of hours per week/Verification/Number of ECTS credits | | | |
|---|---------------------------------|----------------------------|-------------------------------|
| Subject content | Number of hours per week | Form of examination | Number of ECTS credits |
| Course | 2 | Written exam | 15 |
| Seminar | 2 | Case studies | |

A. OBJECTIVES OF THE SUBJECT (The objectives are formulated in terms of professional skills):

| | |
|---------------------------------------|---|
| The general objective of the subject: | Knowledge and deepening of the strategy for publishing the results obtained in scientific research. |
| The specific objectives: | <ol style="list-style-type: none"> 1. Communication of scientific ideas at conferences, in journals and/or books. 2. Choosing the most suitable journal for publication. 3. Organizing a scientific text for publication. 4. The mechanisms of the peer review process of a manuscript. 5. The reasons why a scientific article is published or rejected. 6. The impact factor and other scientometric indicators with relevance for a scientific communication. 7. Knowledge of ethical issues specific to scientific research in the field of life sciences. |

B. TERMS (where applicable)

| | |
|--------------------------|--|
| of course implementation | Adequate room, blackboard, video projector, internet access, dedicated software. |
|--------------------------|--|

C. ACCUMULATED SPECIFIC COMPETENCES (It concerns the competences ensured by the study program of which the subject is a part)

| | |
|---------------------|---|
| Professional skills | <ol style="list-style-type: none"> 1. Knowledge of the general principles of writing a scientific paper. 2. How to write and publish a scientific paper. 3. How to illustrate a scientific paper. 4. How to write a scientific research project. 5. Knowledge of the notion of "copyright" and its ethical implications. |
| Transversal skills | <ol style="list-style-type: none"> 1. The ability to use the professional skills mentioned above in everyday life. 2. Use of ethical principles of scientific research in new contexts. 3. Use of theoretical knowledge in solving practical problems encountered in a scientific research laboratory. |

D. SUBJECT CONTENT

a) Course

| Chapter | Contents | Hours |
|--------------------|--|-----------|
| 1. | What does the phrase "scientific career" mean? | 2 |
| 2. | Communication of scientific ideas in journals, conferences, books. | 2 |
| 3. | The fundamental principles of writing a scientific paper. | 2 |
| 4. | Types of scientific papers. | 2 |
| 5. | Writing a scientific paper. | 2 |
| 6. | The process of evaluating a scientific article (peer-review). | 2 |
| 7. | Scientific manifestations. | 2 |
| 8. | Copyright. | 2 |
| 9. | Databases and scientometrics (bibliometrics). | 2 |
| 10. | Hierarchy of journals. | 2 |
| 11. | Hierarchy of scientific researchers. | 2 |
| 12. | Elaboration of a scientific book. | 2 |
| 13. | Computer tools. | 2 |
| 14. | Ethical aspects of scientific research. | 2 |
| Total hours | | 28 |

b) seminar

| Deployment mode | Hours |
|-----------------------------------|-----------|
| Case studies. Debate. Discussion. | 28 |

E. EVALUATION (The methods, forms of evaluation and their weighting in determining the final grade are specified. The minimum performance standards are indicated, related to the skills defined in point A. **Objectives of the subject**)

| Type of activity | Evaluation criteria | Evaluation methods | Weight in the final grade |
|------------------|---------------------|------------------------|---------------------------|
| Course | Acquired knowledge | Written exam | 75% |
| Seminar | Activity | Presented case studies | 25% |

The results of the subject evaluation are expressed by the following qualifications: "*Very good*"; "*Good*"; "*Satisfactorily*"; "*Unsatisfactory*". The grades "*Very good*", "*Good*" and "*Satisfactory*" allow the doctoral student to obtain the ECTS credits.

F. METHODOLOGICAL LANDMARKS

Frontal lecture combined with dialogue. Use of modern teaching aids (PowerPoint). Course support.

G. CORROBRATION OF THE CONTENTS OF THE DISCIPLINE WITH THE EXPECTATIONS OF THE LEGATES OF THE EPISTEMIC COMMUNITY, PROFESSIONAL ASSOCIATIONS AND REPRESENTATIVE EMPLOYERS IN THE FIELD RELATED TO THE PROGRAM

1. The content of the course is similar to courses in other Western universities, the information is updated and takes into account the basic training level of the PhD students.
2. The course includes theoretical and practical aspects related to the latest regulations on scientific publications.

3. During the seminars, through the debated case studies, the PhD students demonstrate their ability to accurately analyze and propose practical solutions to the problems raised.

H. BIBLIOGRAPHY

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Course holder

Prof. dr. Octavian Popescu



Director of Doctoral School

Dr. Felicia Antohe, Senior Researcher first degree