Master of Education Program in Subject Teaching (Biology)

Institute of Teacher Education, Faculty of Education, ECNU
(Professional Master Degree, 2 years)

Program Overview

The M. Ed. in Subject Teaching (Biology)is a two-year degree program with the maximum duration no longer than 5 years. Students are required to finish at least 37 credits of course work and a thesis to obtain the M. Ed. degree. The average annual tuition is ten thousand Yuan per year. During their study, students will be assigned two advisors—one from Institute of Teacher Education and the other from a middle or high school.

Program Objectives

Students earning the M. Ed. degree in Subject Teaching (Biology)should

- establish a solid knowledge foundation in the area of Subject Teaching (Biology) as well as rich teaching knowledge, and know about the disciplinary culture as well as the frontier of the subject;
- develop strong practical abilities that can quantify them for the future teaching job;
- develop the ability of discovering, analyzing, and solving problems in their teaching, and the awareness of the importance of lifelong learning and continuous professional development;
- develop the ability to conduct educational research in the area of Subject Teaching (Biology)to improve teaching and facilitate professional development;
- understand the status quo and the trends and issues in the areas of Subject Teaching (Biology), curriculum studies, and educational reform.

Credit and Course Requirements

The courses consist of public courses (5 credits), foundation courses (8 credits), core courses (10 credits), elective courses (6 credits) and teaching and research practice (8 credits). The following are the courses and corresponding credits:

Public courses (5 credits)

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- 1. Public English (2 credits) semester 2
- 2. Theory and Practice of Socialism with Chinese Characteristics (2 credits) semester
- 3. Marxism and Methodology of Social Science (1 credit) semester 1

Foundation courses (8 credits)

- 1. Principles of Education Science (2 credits) semester 1
- 2. Curriculum and Instruction (2 credits) semester 2
- 3. Research Methodology in Education (2 credits) semester 1
- 4. Psychological Development and Education (2 credits) semester 2

Core courses (10 credits)

- 1. Biology Curriculum and Teaching Practice Research (2 credits) semester 1
- 2. Design and Teaching Research of Biology Experiment (2 credits) semester 2
- 3. Life Science Frontier and Biology Teaching (2 credits) semester 1
- 4. Measurement and Evaluation for Biological Education (2 credits) semester 2
- 5. Empirical Research of Biological Education (2 credits) semester 1

Elective courses *(6 credits)

- 1. Research Frontier of Subject Education *(2 credits) semester2
- 2. Lectures on Sciences and Humanities* (2 credits) semester 1
- 3. Treatment of Special Topics in Biology Education and Thesis Writing (2 credits) semester 1
- 4. Teachers' professional development based on brain research (2 credits) semester
 - 5. Information Technology and Science Education (2 credits) semester 1
 - 6. STEM Education & Practice (2credits) semester 2
- 7. Moral Education in Subject Teaching and Classroom Management (1 credit) semester 1

Teaching and Research Practice (8 credits)

1. Micro-teaching (1 credit)

Basing core courses such as Studies on Foreign Language Curriculum & Textbooks and Instructional Design and implementation for Foreign Language Teaching, students are required to conduct micro-teaching for at least one week during the first year of the program.

2. Teaching demonstration (1 credit)

Students are required to design and demonstrate a complete lesson (of 45 minutes) and produce a corresponding micro-lesson video during the first year of the program.

3. School trips (1 credit)

Students are required to visit middle/high schools at least four times to observe lessons, attend seminars about the observations and write reports on the trips during the first year of the program.

4. Supervised student teaching (4 credits)

Supervised student teaching is scheduled in the first semester of the second year, and lasts for one semester. This usually takes place in one of the partner schools of ECNU.

5. Educational research (1 credit)

Students are required to carry out an educational research project and write a research paper on the basis of this project under the supervision of an advisor.