[A-3]COURSE SYLLABUS

1. Course Description (Approximately 100 words)

Scientific Basis of Agriculture course is designed as the general professional course for all degree programs related Agriculture counting: Farming, Plant Protection, Agronomy, Farm Management and Water Resources. The course introduces the major areas of scientific agricultural production and research; presents problem solving lessons and introductory skills and knowledge in agricultural science and agri-related technologies. This course provides students with an opportunity to enhance their understanding of the principles and processes of agricultural research. The course will provide students with a foundation in critical thinking, experimental design and data analysis that will be applicable to independent research projects and graduate studies.

2. Course Goals and Objectives (Approximately 100 words)

The aim of this course is to ensure that you can achieve an up-to-date level of understanding and competence that will serve as a lasting and practical basis for a career, for example, in research - whether industry, pure or applied biology, as well as teaching, publishing or management.
The objective of the course is to provide training in scientific and transferable skills through modular lecture courses, research projects, written work, seminars and supervisions.

3. Textbook (Title, Author, Publisher, Year of Publication, etc.)

1. “Деҳқончилик илмий изланиш асослари билан” фанидан ўқув-методик мажмуа. Тошкент – 2010.
2. Mo’minov K.M, Islomov I. “Dehqonchilik ilmiy izlanish asoslari bilan” fani bo’yicha ma’ruzalar kursi. Samarqand-2013.

4. Reference

1. Кулиев Н.Ш. «Талабаларнинг укув – тадкикот ишлари» фанидан маърузалар матни. Бухоро-2015.
2. G. Mirsharipova. «Dehqonchilik ilmiy izlanish asoslari bilan» fanidan o’quv-uslubiy majmua. Guliston-2013.
3. T.O.Almatayev, B.Tojiboyev. «Eksperimentni rejalashtirish va uning natijalarini statistik tahlili» fanidan ma’ruzalar kursi. Andijon-2015.
4. S.A.Vorobev, A.N.Kashtanov, A.M.Likov, I.I.Makarov, "Arable Farming" M .: "Agropromizdat" 1991.
5. A.K.Ermatov "Irrigated Agriculture", "O`qituvchi" T.1983.

Academic Journals:

5. Course Requirements and Grades

For studying of a course students should know following base disciplines: biology, chemistry, environmental studies.

Grading system:
The final grade will be calculated using the following areas and weights:
Homework 15
Independent work 20
Mid-term Exams 35
Final Comprehensive Examination 30
Total 100

6. Course Calendar

Week	Main Content
1	Introduction. Aims, objectives and development history. Methods of scientific
2	Stages and objectives of scientific research. Analyzing scientific data.
3	Field experience. Field experience conditions and features
4	Choosing and preparing a land to experiment. Field experiment methodology
5	Placement methods of experiment repeatability and options. Allocation of pr
6	Planning a field experiment. Experiment conducting technology.
7	Field experiment observation, analysis and measures. Experimental calculat
8	Statistical processing of experimental results. Dispersion analysis.
9	Single and multi-factor field experiments. Dispersion analysis of single-factor
10	Dispersion analysis of multi-factor experiments. Correlation and its types
11	Regression. Regression equations. Maintaining documents and reports on e
12	Document types and documenting. Preparation research paper for publicatic
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