SCHEME OF STUDIES FOR

Approved title of Degree by Board of Studies, Academic Council and NACTE (National Accreditation Council of Teacher Education) is

BS SCIENCE EDUCATION

4 YEARS DEGREE PROGRAMME **(2020-Ownword)**

DEPARTMENT OF SCIENCE EDUCATION

UNIVERSITY OF OKARA

Vision Statement

The Department of Science Education is dedicated to BS Science Education program has a vision to provide a broad foundation in Education that focuses on scientific reasoning and problem solving with teaching of science perspective. Also, this program is an effort to provide students with the science literacy and skills to succeed in schools, and organizations. Moreover, the students are provided a breadth of experimental techniques and understanding on nature of scientific inquiry using modern laboratory work. The policy is to transform the emphasis from aimless rote learning to highly productive science education through active participation of the students in the classroom. The subject of Science Education is introduced from elementary level in General Science and as a subject at secondary and higher secondary levels.

Science is a core area of study that is valuable to all students regardless of their future intentions thus, Science is fun; teaching science should be fun. The Science curriculum mainly based on 'doable' activities and the availability of appropriate resources. Moreover, the science safety manual is in need of critical updating to reflect current practice and to clarify requirements.

Mission Statements

The mission of this program is to achieve the highest possible standards of research and teaching in Science Education and the relevant disciplines. Moreover, the followings are targeted to achieve: To encourage intellectual development and vision in and through Science Education to impart a sound knowledge of Education to students and to help them to use this knowledge creatively and analytically in School Science to develop in students an awareness of the applications of Education including its practical, social and economic aspects such as health, agriculture, industry and defense etc. To develop students' practical, written and oral communication, information retrieval, computing and problem solving skills To encourage students to become effective independent learners To develop the student's vision that is need

based/market based and its continuous development shall be made considering the changing global and national requirements To develop in students the ability to work in groups for cooperative learning so as to acquire respect for human values To encourage students to broaden their knowledge, to develop their own capabilities and self-confidence, to respect learning and to participate in science education.

Objectives of the program:

There are the following objectives of the program

1. To make students knowledgeable and skilled in the relevant course as per national standards of education.
2. To encourage students to take an active part in the classroom activities and be part of interactive classroom.
3. To encourage students to develop curiosity and a spirit of enterprise.
4. To teach good laboratory practice and skills in science as per national standards of education.
5. To acquire students' students to analyze data from experiments or from other sources.
6. To acquire students a readiness in becoming responsible citizens in a changing world in the era of digital literacy.
7. To teach students to be aware of the safety of oneself and others in the laboratory and be committed to safe practices for their future perspectives and in daily life.
8. To provide students with some insight into future career prospect in the fields related to Science Education.

Rationale

The Faculty of Education at University of Okara has been proposed a modern, contemporary and forward-looking BS Science Education. The BS Science Education is built upon the strong foundations and traditions of Science Education that have historically been integral to the faculty's curriculum and instructional technology up to mark as per national standards of Education.

ELIGIBILITY CRITERIA FOR BS Science Education

At Least 2nd Division FSc (Pre-Medical / Pre-Engineering)

ICS (Math, physics, computer), or Mathematics, Physics

ADMISSION CRITERIA

Merit lists will be prepared in accordance with the criteria given in "Admission Regulations".

ASSESSMENT MECHANISM

Assessment and evaluation of students will be according to the "Assessment and Evaluation Regulations" of the University of Okara.

TITLE OF THE DEGREE

The title of the degree is BS Science Education (BSED)

4 Years Degree Program

S. No	Transcript Code	Course Title	Credit Hours
SEMESTER-I			
1	BSED101	Language in use	3
2	BSED102	Foundations of Education	3
3	BSED103	General Methods of Teaching	3
Any Three Content Courses according to subjects studied at F. Sc. Level			
4	BSED 104	Physics-I/ Botany-I	3
5	BSED 105	A Course of Mathematics -I/ Chemistry-I	3
6	BSED 106	B Course of Mathematics -I/ Zoology-I	3

SEMESTER-II			
S. No	Transcript Code	Course Title	Credit Hours
1	BSED201	Academic Reading and writing	3
2	BSED202	Introduction to Computer applications	3
3	BSED203	Human development and learner psychology	3
Any Three Content Courses according to subjects studied at F. Sc. Level			
4	BSED204	Physics-II / Botany-II	3
5	BSED205	A Course of Mathematics –II/ Chemistry-II	3
6	BSED206	B Course of Mathematics –II/ Zoology-II	3

S. No	Transcript Code	Course Title	Credit Hours
SEMESTER-III			
1	BSED301	Communication Skills	**3**
2	BSED302	Pakistan Studies	**2**
3	BSED303	Critical Thinking and Reflective Practices	**3**
Any Three Content Courses according to subjects studied at F. Sc. Level			
4	BSED304	Physics-III / Botany-III	**3**
5	BSED305	A Course of Mathematics –III/ Chemistry-III	**3**
6	BSED306	B Course of Mathematics –III/ Zoology-III	**3**
SEMESTER-IV			
S. No	Transcript Code	Course Title	Credit Hours
1	BSED401	Islamic Studies / Ethics	**2**
2	BSED402	Educational Assessment & Evaluation	**3**
3	BSED403	Educational Leadership & Management	**3**
Any Three Content Courses according to subjects studied at F. Sc. Level			
4	BSED404	Physics-IV/ Botany-IV	**3**
5	BSED405	A Course of Mathematics –IV/ Chemistry-IV	**3**
6	BSED406	B Course of Mathematics –IV/ Zoology-IV	**3**

S. No	Transcript Code	Course Title	Credit Hours
SEMESTER-V			
1	BSED501	Introduction to Environmental Science Education	**3**
Any Two Pedagogy Course according to Content Area			
2	BSED502	Teaching of Physics/ Teaching of Chemistry	**3**
3	BSED503	Teaching of Mathematics/ Teaching of Biology	**3**
	Any ONE Course according to Area of Specialization		
4	BSED504	Advance Botany-I/Advance Chemistry-I/Advance Physics-I/ **Advance Mathematics-I**/ Advance Zoology-I	**3**
5	BSED505	Advance Botany-II/Advance Chemistry-II/Advance Physics-II/ **Advance Mathematics-II**/ Advance Zoology-II	**3**
6	BSED506	Lesson planning and Teaching Strategies (Teaching Practice I)	**4**

SEMESTER-VI			
S. No	Transcript Code	Course Title	Credit Hours
1	BSED601	Educational Research Methods	**3 (2+1)**
2	BSED602	Science communication to school and Community	**3**
3	BSED603	Advance Botany-III/Advance Chemistry-III/Advance Physics-III/ **Advance Mathematics-III**/ Advance Zoology-III	**3**
4	BSED604	Advance Botany-IV/Advance Chemistry- IV /Advance Physics- IV / **Advance Mathematics- IV** / Advance Zoology- IV	**3**
5	BSED605	Data Analysis in Education	**3 (2+1)**
6	BSED606	Classroom Management Strategies (Teaching Practice II)	**4**

SEMESTER-VII			
S. No	Transcript Code	Course Title	Credit Hours
1	BSED701	Teaching of Chemistry/ Teaching of Physics	**3**
2	BSED702	Arts and Craft in Education	**3**
3	BSED703	Advance Botany-V/Advance Chemistry-V/Advance Physics-V/ **Advance Mathematics-V**/ Advance Zoology-V	**3**
4	BSED704	Advance Botany-VI/Advance Chemistry- V I/Advance Physics- VI/ **Advance Mathematics- VI** / Advance Zoology- VI	**3**
5	BSED705	**Teaching of Biology**/ Teaching of Mathematics	**3**
6	BSED706	Pedagogical practices and Assessment Strategies (TP-III)	**3**
7	BSED707	Instructions and Curriculum Development	**3**

SEMESTER-VIII			
1	BSED801	Advance Teaching Strategies (TP-IV)	**4**
2	BSED802	Comparative Science Education	**3**
3	BSED803	Advance Botany-VII/Advance Chemistry- VII/Advance Physics- VII/ **Advance Mathematics- VII**/ Advance Zoology- VII	**3**
4	BSED804	Advance Botany-VIII/Advance Chemistry- VIII/Advance Physics- VIII/ **Advance Mathematics- VIII**/ Advance Zoology- VIII	**3**
5	BSED805	Contemporary Issues and Trends in Education	**3**
6	BSED806	Research Project in Science Education (Thesis)	**3**

Total Credit Hours: 147 hours