Curriculum

for

[Program name]
Example: B.Sc. (Hons.) in Agriculture

KU Logo

Name of the Discipline
Khulna University

March, 2016

1. Program name: Degree offered by the Discipline [*example - B.Sc. (Hons.) in Agriculture*]

2. Vision:

The vision statement is not about what the program is **currently doing**, but what the Discipline **hopes to achieve** through the program.

A vision statement is:

- **Aspirational** in that it's about the goals. Once the vision is achieved, one needs to write a new vision statement.
- **Inspirational** in that it provides life and direction to day-to-day work.
- **Motivational** in that it provides a reason for the work one does.
- **Clear, memorable, and concise**.

Example:

Achieve excellence and leadership in teaching, research and community service to ensure food security and national development [for B.Sc. (Hons.) in Agriculture].

3. Mission:

To build a mission statement the Discipline should:

- State the educational **purpose** of the field of study that is unique to the discipline.
- Identify the departmental **values** related to serving the students and the community.
- Identify the **journey (day-to-day operations)** set for the students.
- **Should guide the actions** of the faculty, spell out the program's overall goal, provide a sense of direction, and guide decision-making and assist in curriculum decisions.

Example:

To provide students with educational and research experience in various agricultural branches fortified with talent in innovation, self-learning, and career competitiveness. The Discipline also contributes in scientific progress and environmental adaptation for socio-economic enhancement. [for B.Sc. (Hons.) in Agriculture].

4. Program objectives:

Specific objectives in the line of vision and mission

Example:

To provide need oriented education having up-to-date knowledge in Agriculture to endow developed knowledge and skills of the students in-

1. Sustainable soil management.
2. Crop variety development.
3. Crop management practices
4. Crop protection measures
5. Plant propagation and nursery management

[for B.Sc. (Hons.) in Agriculture].

5. Learning outcomes: The expected abilities of the students after the completion of the program

Format: Students will be able to (Some commonly used action verbs)

Cognitive Level:

Describe……..; Determine ……; Compare…….; Discuss …..; and Evaluate……

Affective Level:

Be aware ....; Value…; Organize the values…… and Internalize the values……

Psychomotor Level:

Imitate…….., Manipulate……..; Precise…….; Articulate…….; Naturalize……

Example:

Graduate of this program will be able to-

Cognitive

1. *Demonstrate a substantial knowledge and understanding of the core aspects of Agriculture;*
2. *Apply the theoretical insights and methods of inquiry from their field of study in considering issues and problems in other contexts;*
3. *Investigate complex problems and develop creative solutions with limited guidance, using insights from their own and other related fields of study;*

Affective

1. *Engage in independent learning using scholarly reviews and secondary sources of information;*
2. *Participate in activities to keep up to date with developments in their field and enhance their own knowledge, understanding and skills;*
3. *Exercise initiative, personal responsibility and accountability in the professional environment/work place;*

Psychomotor

1. *Handle laboratory instruments and follow technical protocols with safety;*
2. *Use practical skills and enquiry efficiently and effectively within the area of study;*
3. *Analyze data critically, make judgments and propose solutions to problems;*

6. Course structure:

Program duration: --- Years

Number of terms: -----

Term duration: ------ Weeks

Total number of credit hours available: ------

Minimum credit hours to be earned: ---------

6.1 Summary of the total available credits (core and optional) from different areas of study

Example:

Distributions of credits in different areas of study

Areas of study	**Theory**	**Sessional/ Field Work**	**Total (Core/optional)**	**Total**			
	Core	Optional	Core	Optional	Core	Optional	
Agriculture	95.0	22.0	36.0	6.0	131.0	28.0	159.0
Basic Science	8.0	3.0	3.0	-	11.0	3.0	14.0
Arts & Humanities and Social Science	7.0	-	-	-	7.0	-	7.0
Information technology (IT)	-	-	-	6.0	6.0	-	6.0
Total	**110.0**	**25.0**	**39.0**	**12.0**	**149.0**	**37.0**	**186.0**

Year-wise distribution of credits

Year	**Term**	**Theory**		**Sessional/ Field Work**		**Total**
		Core	Optional	Core	Optional	
First	First					
	Second					
Second	First					
	Second					
Third	First					
	Second					
Fourth	First					
	Second					
Total						

6.2 Course outline:

Term-wise course outline for the entire program

Example:

First Year First Term			
Course No.	**Course Title**	**Contact Hours per Week**	**Credit Hours**
AT-1101	Fundamentals of Agronomy	3-0	3
AT-1102	Fundamentals of Agronomy Sessional/Field Work	0-2	1
AT-1103	Introductory Soil Science	3-0	3
AT-1104	Introductory Soil Science Sessional/Field Work	0-2	1
AT-1105	Agricultural Botany	2-0	3
AT-1106	Agricultural Botany Sessional/Field Work	0-2	1
HSS-1155	Sociology	2-0	2
Chem-1159	Chemistry	3-0	3
Chem-1160	Chemistry Sessional	0-2	1
Math-1161	*Mathematics	3-0	3
Total	**Theory: 5 Core + 1 Optional** **Sessional: 4 Core + 0 Optional**	**16-8**	**21.0** **Core 18** **Optional 3**

- Indicates optional course

6.3 Course profile:

Detailed description of individual course and should include course code, title, credit hr., year, term, rationale, objectives, ILOs and course content.

Example:

<table>
<tr><td>Course: AT -1101: Fundamentals of Agronomy</td><td>Credit Hour: 03</td><td>Year: First</td><td>Term: First</td></tr>
<tr><td colspan="4">Rationale: This course is designed to provide fundamental concepts of agronomy and practices involved in crop production.</td></tr>
<tr><td colspan="4">Course Objectives:
• Conceptualize agriculture and agronomy
• Acquire knowledge on weather and climate, agroecological zones and distribution of crops therein
• Understand plant nutrients and their management
• Acquaint with crop production practices.</td></tr>
<tr><td colspan="2">Intended Learning Outcomes (ILOs)</td><td colspan="2">Course Content</td></tr>
<tr><td colspan="4">Section – A</td></tr>
<tr><td colspan="2">At the end of the course the students will be able to-
1. Describe various aspects of agriculture and agronomy.
2. Explain the weather and climate and their influence on crops.
3. Describe the agricultural geography of Bangladesh emphasizing land topography and agro-ecological zones.
4. Describe crop and their classification. Explain plant nutrients, their functions, deficiency symptom and toxic effects.</td><td colspan="2">1. Introduction: concept, importance and scope of agriculture and agronomy; history of agriculture; chronology of Bangladesh agriculture; basic principles of agronomy; agricultural research institutes of Bangladesh.
2. Climate and crops: definition of weather and climate; differences between weather and climate; weather elements and their role on the growth and development of crops; micro and macro climate
3. Agricultural geography of Bangladesh: location of Bangladesh in agricultural perspective; land topographic units and the crops grown therein; agroecological zones of Bangladesh; crops: concept and classification; cropping seasons and their characteristics, land utilization pattern.
4. Crop nutrition: essential plant nutrient elements–their sources, forms of absorption, functions, hunger signs and toxic effects.</td></tr>
<tr><td colspan="4">Section – B</td></tr>
<tr><td colspan="2">5. Define and classify tillage, tillage implements;
6. Describe influence of tillage on crop and soil.
7. Define manures and fertilizers,
8. Describe fertilizer application methods; maintenance of soil fertility and productivity.
9. Narrate different planting methods
10. Explain intercultural operations of crops.</td><td colspan="2">5. Land preparation: definition, classification and objectives of tillage; influences of tillage on soil properties; classification of tillage implements; tillage operations and their objectives; minimum tillage.
6. Manures and fertilizers: concept, classification, nutrients content; composting and green manuring; methods of application of manures and fertilizers.
7. Planting methods: seed sowing/planting methods; time and depth of sowing/planting of major crops; crop stand establishment and planting geometry.
8. Intercultural operations: weeding, mulching, thinning, earthing up, nipping, propping, staking, detopping and tying; irrigation and drainage.</td></tr>
</table>

7. Teaching strategy:

Popular strategies are Lecture, Case method, Discussion, Active learning (Apply what students are learning), Cooperative learning (small groups work together for achieving a common goal), Integrating technology, Distance learning, etc.

8. Assessment strategy:

Distribution of Marks: [To be prepared as per the ordinance]

Marks distribution for theory courses: [To be prepared as per the ordinance]

Marks distribution for sessional courses: [To be prepared as per the ordinance]

Bases for class attendance marks (both for theory and sessional): [To be prepared as per the ordinance]

Continuous Assessment: [To be prepared as per the ordinance]

Thesis evaluation: [To be prepared as per the ordinance]

Grading system and grading scale: [To be prepared as per the ordinance]

Assessment tools:

Theory courses:

Class participation (Example: attendance)

Continuous assessment (examples: Quiz, spot test, open book exam, presentation, assignments, written exams etc.)

Term final examination (written test)

Sessional courses:

Class participation (Example: attendance)

Sessional assessment (examples: field work, lab work, case study, performance, spot test, open book exam, presentation, assignments, written exams etc.)

Viva-voce (oral)

Thesis/project:

Participation (Example: Contact/Discussion/Communication with the supervisor)

Evaluation (examples: report, project paper, monograph etc.)

Viva-voce (oral)