

# Virtual University of Pakistan

## Assessment Team Report

Department Name: Bioinformatics and Computational Biology

Program Name: BS Bioinformatics

### Criteria Referenced Evaluation

	Poor performance in most of the areas.	Fair performance in most of the areas.	Good performance for most areas / No poor performance in any areas.	Good to excellent performance in all areas.	Excellent performance in all areas.	Score
Criterion 1					✓	5.00
Criterion 2					✓	17.50
Criterion 3				✓		8.00
Criterion 4					✓	8.67
Criterion 5					✓	13.91
Criterion 6					✓	17.14
Criterion 7		✓				5.33
Criterion 8				✓		8.00

Criterion 1 – Program Mission, Objectives and Outcomes						Weight =		0.05	
<b>Factors Score</b>									
1	Does the Program have documented measureable objectives that support faculty / college and institution mission statements?	✓	4	3	2	1			
2	Does the Program have documented outcomes for graduating students?	✓	4	3	2	1			
3	Do these outcomes support the Program objectives?	✓	4	3	2	1			
4	Are the graduating students capable of performing these outcomes?	✓	4	3	2	1			
5	Does the department assess its overall performance periodically using quantifiable measures?	✓	4	3	2	1			
6	Is the result of the Program Assessment documented?	✓	4	3	2	1			
<b>Total Encircled Value (TV)</b>		<b>30</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>			
<b>Score 1 (S1) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>5.00</b>							
Criterion 2 – Curriculum Design and Organization						Weight =		0.20	
<b>Factors Score</b>									
1	Is the curriculum consistent?	5	✓	3	2	1			
2	Does the curriculum support the program's documented objectives?	✓	4	3	2	1			
3	Are theoretical background, problem analysis and solution design stressed within the program's core material?	5	✓	3	2	1			
4	Does the curriculum satisfy the core requirements laid down by respective accreditation bodies? (refer Appendix A of the Self Assessment Manual)	✓	4	3	2	1			
5	Does the curriculum satisfy the major requirements laid down by HEC and the respective councils / accreditation bodies?	✓	4	3	2	1			
6	Does the curriculum satisfy the general education, arts and professional and other discipline requirements as laid down by the respective / accreditation bodies / council? (Refer to Appendix A of the Self Assessment Manual)	5	✓	3	2	1			
7	Is the information technology component integrated throughout the program?	5	✓	3	2	1			
8	Are oral and written skills of the students developed and applied in the program?	5	✓	3	2	1			
<b>Total Encircled Value (TV)</b>		<b>15</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>			
<b>Score 2 (S2) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>17.50</b>							
Criterion 3 – Laboratories and Computing Facilities						Weight =		0.10	
<b>Factors Score</b>									
1	Are laboratory manuals / documentation / instructions etc. for experiments available and readily accessible to faculty and students?	5	✓	3	2	1			
2	Are there adequate number of support personnel for instruction and maintaining the laboratories?	5	✓	3	2	1			
3	Are the university's infrastructure and facilities adequate to support the program objectives?	5	✓	3	2	1			
<b>Total Encircled Value (TV)</b>		<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>			
<b>Score 3 (S3) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>8.00</b>							
Criterion 4 – Student Support and Advising						Weight =		0.10	
<b>Factors Score</b>									
1	Are the courses being offered in sufficient frequency and number for the students to complete the program in a timely manner?	✓	4	3	2	1			
2	Are the courses in the major area structured to optimize interaction between the students, faculty and teaching assistants?	5	✓	3	2	1			
3	Does the university provide academic advising on course decisions and career choices to all students?	5	✓	3	2	1			
<b>Total Encircled Value (TV)</b>		<b>5</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>			

Score 4 (S4) =  $[TV / (\text{No. of Questions} * 5)] * 100 * \text{Weight} =$

8.67

Criterion 5 – Process Control						Weight =	0.15
Factors Score							
1	Is the process to enroll students to a program based on quantitative and qualitative criteria?	✓	4	3	2	1	
2	Is the process above clearly documented and periodically evaluated to ensure that it is meeting its objectives?	✓	4	3	2	1	
3	Is the process to register students in the program and monitoring their progress documented?	✓	4	3	2	1	
4	Is the process above periodically evaluated to ensure that it is meeting its objectives?	5	✓	3	2	1	
5	Is the process to recruit and retain faculty in place and documented?	✓	4	3	2	1	
6	Are the processes for faculty evaluation & promotion consistent with the institution mission?	5	✓	3	2	1	
7	Are the processes in 5 and 6 above periodically evaluated to ensure that they are meeting their objectives?	5	✓	3	2	1	
8	Do the processes and procedures ensure that teaching and delivery of course material emphasize active learning and that course learning outcomes are met?	✓	4	3	2	1	
9	Is the process in 8 above periodically evaluated to ensure that it is meeting its objectives?	5	✓	3	2	1	
10	Is the process to ensure that graduates have completed the requirements of the program base on standards and documented procedures?	✓	4	3	2	1	
11	Is the process in 10 above periodically evaluated to ensure that it is meeting its objectives?	✓	4	3	2	1	
<b>Total Encircled Value (TV)</b>		<b>35</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>Score 5 (S5) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>13.91</b>					
Criterion 6 – Faculty						Weight =	0.20
Factors Score							
1	Are there enough full time faculty members to provide adequate coverage of the program areas / courses with continuity and stability?	5	✓	3	2	1	
2	Are the qualifications and interests of faculty members sufficient to teach all courses, plan, modify and update courses and curricula?	✓	4	3	2	1	
3	Do the faculty members possess a level of competence that would be obtained through graduate work in the discipline?	✓	4	3	2	1	
4	Do the majority of faculty members hold a PhD degree in their discipline?	5	4	✓	2	1	
5	Do faculty members dedicate sufficient time to research to remain current in their disciplines?	✓	4	3	2	1	
6	Are there mechanisms in place for faculty development?	5	✓	3	2	1	
7	Are faculty members motivated and satisfied so as to excel in their profession?	5	✓	3	2	1	
<b>Total Encircled Value (TV)</b>		<b>15</b>	<b>12</b>	<b>3</b>	<b>0</b>	<b>0</b>	
<b>Score 6 (S6) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>17.14</b>					
Criterion 7 – Institutional Facilities						Weight =	0.10
Factors Score							
1	Does the institution have the infrastructure to support new trends such as e-learning?	5	✓	3	2	1	
2	Does the library contain technical collection relevant to the program and is it adequately staffed?	5	4	3	✓	1	
3	Are the class rooms and offices adequately equipped and capable of helping faculty carry out their responsibilities?	5	4	3	✓	1	
<b>Total Encircled Value (TV)</b>		<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>0</b>	
<b>Score 7 (S7) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>5.33</b>					

Criterion 8 – Institutional Support					Weight =		0.10	
Factors Score								
1	Is there sufficient support and finances to attract and retain high quality faculty?	5	✓	3	2	1		
2	Are there an adequate number of high quality graduate students, teaching assistants and Ph.D students?	5	✓	3	2	1		
<b>Total Encircled Value (TV)</b>		<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>Score 8 (S8) = [TV/(No. of Questions *5)] *100 *Weight =</b>		<b>8.00</b>						

**OVERALL ASSESSMENT SCORE =**

**S1 + S2 + S3 + S4 + S5 + S6 + S7 +S8**

$$= 5.00 + 17.50 + 8.00 + 8.67 + 13.91 + 17.14 + 5.33 + 8.00$$

$$= 83.55 / 100$$

**Comments:**

Overall Department of Bioinformatics and Computational Biology performs very well, the accuracy is excellent and the quantity plus quality of work produced is outstanding.