SOHAR UNIVERSITY
جامعة صحار

COURSE INFORMATION

Faculty	General Foundation Programme
Program	Mathematics

1. General Course Information

1.1. Course Title: **Pure Mathematics**

1.2. Course Code: **SET 3**

1.3. Course Level: **GFP**

1.4. Course Credit Units: **NA**

2. Course Learning Outcomes

2.1. Course Learning Outcomes mapping with Program Learning Outcomes

Course Learning Outcomes	Program Learning Outcomes										
Upon completion of the course, students are expected to be able to:	17	18	19	20	21	22	31	32	33	34	35
A. Knowledge and Understanding											
A.1. Use coordinate plane to solve algebraic and geometric problem and understand geometric concepts such as equation of a line, perpendicular, parallel, and tangent lines.	✓										
A.2. Determine the geometric concept of equation of a circle.		✓									
A.3. Determine the inverse relationship between exponents and logarithms.			✓								
A.4. Use the inverse relationship between exponents and logarithms relationship to solve related problems.			✓								
A.5. Solve exponential and logarithmic equations.				✓							
A.6. Determine the basic concepts of descriptive statistics, mean, median and mode.					✓						
A.7. Summarize data into tables and simple graphs (bar charts, histogram, and pie chart).					✓						
A.8. Determine the basic probability concepts.						✓					
A.9. Compute the probability of simple events using tree diagrams and formulas for permutations and combinations.						✓					
A.10. Solve quadratic equations using quadratic formula.							✓				
A.11. Determine the definition of the different types of angles.								✓			

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A.12. Measure angles in degrees and radians.						✓				
A.13. Prove the trigonometric identities.							✓			
A.14. Use the law of sines and cosines to solve a triangle.								✓		
A.15. Determine the definition of a function and its graph.									✓	
A.16. Describe analytically the trigonometric and circular functions.									✓	

B. Cognitive/Intellectual Skills

B.1. Use the three types of symmetry of an equation to sketch its graph.	✓									

C. Practical Skills

C.1. Use the law of sines and cosines to solve real-life problems.								✓		