**Detailed Hybrid Classroom Plan Template**

 OFFLINE PLAN

Week :1&2

Date :13MAR 2014

Unit Topic : FUNCTIONS

Objectives :

 -Articulate verbally the relationship between variables arising in everyday contexts.

 -translate between everyday situation and sketch the graphs of relationship between variables

 -interpret algebraic function in terms of contexts in which they arise

 -Reflect on the domains of everyday function and in particular on whether they should be discrete or continuous

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| Day 1 F2F :  ***CONSEPT OF FUNCTIONS(40mins)*** Presentation on the concepts of a function by giving the student some real life examples relating to function. <https://www.youtube.com/watch?v=NRB6s77nx2g&hd=1>  ***four situation activity(20 min)***-This activity is a matching activity where by students will be given Four situations in groups, (real life situations) with four graphs and asked to match each situation with its correct graph. They have to explain why the graph match to the situation they have placed. If they think the graph should be changed, they have to say how it should be improved. Example they may think that it should be discrete points rather than a continuous line. Arrange cards side by side not one on top of the other so that they can be seen by the teacher as he/she moves around. | Day 2 F2FGroup discussions on functions.(40 min)Domain and range of a functionPresentation from group discussion(20min)The teacher will provide 5 question to the students each with their own questions in their groups and ask them to solve and share their solutions with others by using gallery walks.(the teacher will be walking around the groups to assist them where necessary) Finally correct some errors to make it clear to every student and give them a homework for assessment task. By making it clear a teacher can use a video, <https://www.youtube.com/watch?v=w81y25anEOM&hd=1>  | Day 3 F2FGraphs of a function(40min)Presentation of materials on how to draw the graphs of a function and find domain and range from the graph while given an equation <https://www.youtube.com/watch?v=ObEucyZX464&hd=1> ***Matching cards activity(20mins)***Students in groups will be given everyday life situation, equations and the graphs relate to situations. They will match each situation to its correct equation and graph, ask them to give reason to their answers. | Day 4Project making activities.(Reading articles and making journal summary from articles.(provide them with packets)(40mins) | Day 5Project making activities.(visiting library and exploring some materials for next lesson)A teacher have to give task to the students to go in the library and try to explore some materials to be discussed in the next lesson in f2f time. |
| Day 6.F2FInverse ***of a function(40Mins)***The teacher will present materials on how to find the inverse of a function in both set of ordered pairs and in equation form as well as from the graphs. <http://www.noodle.org/learn/details/340756/inverse-function-of-a-rational-function> ***Groupe discussion (20min)***Small grope discussions on how to find the inverse of a function from the given situations. | Day 7Provide packets to the students for home work with dead line. | Day 8Visiting library and exploring some information from different sources concerning the topic or subtopic and doing some assignments. | Day 9F2F***Problem solving activities(35mins***)***Reciprocal reading activity(25mins)***The students will be given different problems to deal with in pairs. Give them home work to do the same thing and submit next period. | Day 10 : EvaluationCorrection of some mistakes and errors from previous tasks(20min)***Classroom assignment and testing.(40mins)***The students will be having mid information tests. |

**Semi-Detailed Hybrid Classroom Plan**

Unit Topic : \_\_\_\_\_\_FUNCTIONS\_\_\_\_\_\_\_\_\_

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| Week: \_\_\_1&2\_\_\_\_\_\_\_\_\_\_Date: \_\_\_\_13MARCH 2014\_\_\_\_\_\_\_\_\_ | **Description of F2F activities\***(including time estimates) | **Description of out-of-class activities**(including time estimates) |
| **By the end of this lesson, students should be able to:**• Articulate verbally the relationships between variables arising in everyday contexts.• Translate between everyday situations and sketch graphs of relationships between variables.• Interpret algebraic functions in terms of the contexts in which they arise.• Reflect on the domains of everyday functions and in particular whether they should be discrete orcontinuous. | presentation of Function concepts to the student using real life examples by using videos.(40mins)day 1 , 40 mins day 3 and 40 min day 6.Four situation activity(20)mins)day 1 and day 3 20 minsSupervision from the group discussion day 2 (40 mins) and 20 min day 6 ,presentation 20 minsProblem solving activity day 9 35 mins,Reciprocal reading activity 25mins day 9-Group discussion-Home works-Quizzes-Project making activities-Minor examsMajor exams | Reading articles from packets provided and making summary as journals.Visiting library and exploring different concepts concerning the given topics .Modeling situations from different Math ideas. |
| **Assessment Tools** |
| **Assignments Due** |