Session Plan

Subject Name: Advance surveying

Subject Code: 401

Name of Faculty: Mr. Sanad Sahu

Course Outcomes

Subject Name : Advance surveying

Subject Code:401

After the completion of this course the student will be able to:

CO 401.1 Student will be able to explain plane table survey and there uses.

CO 401.2 Student will be able to describe theodolite instrument and also measure horizontal,vertical and deflection angle by theodolite.

CO 401.3 Student will be able to explain tacheometer instrument and determine simple numerical problems on above topic.

CO 401.4 Student will be able to explain curves used in railway or road alignment .

CO 401.5Student will be able to describe various advance survey equipments and there uses.

CO 401.6 Student will be able to explain aerial survey and aerial photography.

CO 401.7 Student will be able to explain remote sensing and system of remote sensing.

Unit I: Plane table survey

S.No	Topic Name	CO Attempted	Resources Used	Mode of Teaching	Expected Date	Actual Date	Remark
1	Principle of plan table survey,accessories required and setting out of plan table survey.	**CO 401.1**	Chalk and Board	Lecture Method	22/01/18 23/01/18 24/01/18		
2	Levelling,centering and orientation of plane table Method of plane table survey-radiation,intersection and traversing.	**CO 401.1**	Chalk and Board	Lecture Method	25/01/18 27/01/18 29/01/18		
3	Merit and demerits of plane table survey	**CO 401.1**	Chalk and Board	Lecture Method	30/01/18		

Expected Study Hours: hrs

Actual Study Hours:

Reason for Delay

Signature of Faculty **Signature of HOD**

Unit II: Theodolite survey

S.No	Topic Name	CO Attempted	Resources Used	Mode of Teaching	Expected Date	Actual Date	Remark
1	Components of transit and non transit theodolite and there function	**CO 401.2**	Chalk and Board	Lecture Method	01/02/18 02/02/18		
2	Temporary and permanent adjustment of theodolite	**CO 401.2**	Chalk and Board	Lecture Method	03/02/18 05/02/18		
3	Measurement of horizontal and vertical angle by theodolite	**CO 401.2**	Chalk and Board	Lecture Method	06/02/18 07/02/18		
4	Method of repetition,error elimination by repetition method	**CO 401.2**	Chalk and Board	Lecture Method	08/02/18 09/02/18 10/02/18		
5	Sources of error in theodolite survey	**CO 401.2**	Chalk and Board	Lecture Method	12/02/18 13/02/18		
6	Thodolite Traversing computationand balancing the travers by bodwitch rule,transit rule.	**CO 401.2**	Chalk and Board	Lecture Method	15/02/18 16/02/18 17/02/18		
7	Unit test		Pen and paper	Written and quiz	19/02/18		

Expected Study Hours: hours

Actual Study Hours:

Reason for Delay

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Unit III: Tacheometric survey

S.No	Topic Name	CO Attempted	Resources Used	Mode of Teaching	Expected Date	Actual Date	Remark
1	**Principle of tacheometer**	**CO 401.3**	Chalk and Board	Lecture Method	20/02/18 21/02/18		
2	Essential requirement of tacheometer ,uses of tacheometer	**CO 401.3**	Chalk and Board	Lecture Method	22/02/18 23/02/18 24/02/18		
3	Fixed hair method and staff held method	**CO 401.3**	Chalk and Board, Projector	Lecture Method	26/02/18 27/02/18 28/02/18		
4	Determination of tacheometric constant,simple numerical problems	**CO 401.3**	Chalk and Board	Lecture Method	01/03/18 05/03/18 06/03/18		
5	Revision	**CO 401.3**	-	Discussion	07/03/18		
6	Unit Test		Pen and paper	Written and quiz	08/03/18		

Expected Study Hours: hrs
Actual Study Hours: Reason for Delay

Signature of Faculty **Signature of HOD**

Unit IV: Curve

S.No	Topic Name	CO Attem pted	Resources Used	Mode of Teaching	Expected Date	Actual Date	Remark
1	**Curves and its types Notation of simple circular curve**	**CO 401.4**	Chalk and Board,	Lecture	09/03/18 10/03/18 12/03/18		
2	**Designation of curve by radius and degree of curve**	**CO 401.4**	Chalk and Board,	Lecture & Demo	13/03/18 14/03/18		
3	Method of setting out curve by offset from long chord method rankine methodSimple numerical problem.	**CO 401.4**	**Chalk & board,**	**Lecture**	15/03/18 16/03/18 17/03/18 20/03/18		
4	Unit Test		Pen and paper	Written and quiz	21/03/18		

Expected Study Hours: hrs

Actual Study Hours:

Reason for Delay

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Unit V: Advance survey Equipments

S.No	Topic Name	CO Attempted	Resources Used	Mode of Teaching	Expected Date	Actual Date	Remark
1	**Construction and use of one second micro optic theodolite**	**CO 401.5**	Chalk and Board	Lecture Method	22/03/18 23/03/18		
2	Electric digital theodolite,features of E.D.M	**CO 401.5**	Chalk and Board	Lecture Method	24/03/18 26/03/18		
3	Component of E.D.M and their functions,uses	**CO 401.5**	Chalk and Board	Lecture Method	27/03/18 28/03/18		
4	**Total station**	**CO 401.5**	Chalk and Board	Lecture Method	31/03/18 01/04/18		
5	Rivision		Pen and paper	Written and quiz	03/04/18 To 28/04/18		

Expected Study Hours: hrs

Actual Study Hours:

Reason for Delay

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Unit VI:Aerial Survey and Remot Sensing

S.No	Topic Name	CO Attempted	Resources Used	Mode of Teaching	Expected Date	Actual Date	Remark
1	Aerial survey introduction,definition. Aerial photograph	**CO 401.6**	Chalk and Board	Lecture Method	04/04/18 05/04/18		
2	Remote Sensing ,electromagnetic energy	**CO 401.6**	Chalk and Board	Lecture Method	06/04/18 07/04/18		
3	Remote sensing system-Passive system,Active system	**CO 401.6**	Chalk and Board	Lecture Method	09/04/18 10/04/18		
4	**Application-mineral,land use Natural hazards and environmental engineering system**	**CO 401.6**	Chalk and Board	Lecture Method	11/04/18 12/04/18		
5	Test		Pen and paper	Written and quiz	13/04/18		

Expected Study Hours: hrs

Actual Study Hours:

Reason for Delay

Signature of faculty **Signature of HOD**