SET OF LECTURE'S TIME TABLE (SAP)

Introduction of Geodesy (TGD 108-2 SKS)

By:

1. Yudo Prasetyo, ST., MT.
2. Ir. Sutomo Kahar

GEODESY DEPARTEMENT

ENGINEERING FACULTY

DIPONEGORO UNIVERSITY

2008
SET OF LECTURE'S TIME TABLE (SAP)

Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 1

A. Target :
1. General Instructional Target
   In final of lecturing expected by student to obtain knowledge and understanding of
   Geodesy, Geomatica and Geoinformation and also implementation with precisely.
2. Specific Instructional Target
   After attending the lecture with Introduction Topic expected by student can:
   
   " Explain concept and history early geodesy and geomatika of geoinformation "
   
   “ Explaining benefit and usefulness of geodesy, and geomatika of geoinformasi "
   
   “ Formulation of geodesy science branch, and geomatika of geoinformasi along with
   the area of him”

B. Main Subject : Introduction of Geodesy.

C. Sub Main Subject :
    1. Explanation Of Introductory Specifics Discussion of Geodesy.
    2. Explanation of concept and history early geodesy, and geomatika of geoinformation.
    3. Explanation of benefit and usefulness of geodesy, and geomatika of geoinformation.
    4. Explanation of formulation of geodesy science branch, and geomatika of geoinformasi
       along with the area of formulation.
D. Lecturing Activity:

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<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
<th>Media</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1. Introduction of geodesy explanation.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>2. Introduction of geodesy Advantages Explanation.</td>
<td>2. Discuss</td>
<td>White</td>
</tr>
<tr>
<td></td>
<td>3. Competency Explanation TIU and TIK.</td>
<td></td>
<td>Board</td>
</tr>
<tr>
<td>Main</td>
<td>1. Explanation Of Introductory Specifics Discussion of Geodesy.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>2. Explanation of concept and history early geodesy, and geomatica of geoinformation.</td>
<td>2. Discuss</td>
<td>White</td>
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<td></td>
<td>3. Explanation of benefit and usefulness of geodesy, and geomatica of geoinformation.</td>
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<td>Board</td>
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<tr>
<td></td>
<td>4. Explanation of formulation of geodesy science branch, and geomatika of geoinformasi along with the area of formulation.</td>
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<tr>
<td>Closing</td>
<td>1. Summary subject which have been submitted.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>2. Give questions, discuss and homeworks.</td>
<td>2. Discuss</td>
<td>White</td>
</tr>
<tr>
<td></td>
<td>3. Give general explanation about the next material of subject.</td>
<td></td>
<td>Board</td>
</tr>
</tbody>
</table>

E. Evaluation:

Make discussion and question-answer together to understand about student knowledge understanding onto subject material.
F. Referensi:

Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 2

G. Target :
1. General Instructional Target
   In final of lecturing expected by student to obtain knowledge and understanding of Coordinate System and also implementation with precisely.
2. Specifc Instructional Target
   After attending the lecture with Introduction Topic expected by student can:
   1. Formulating implementation and understanding of coordinate systems concept.
   2. Can define and formulate each;every method determination of horizontal position.
   3. Comprehending implementation from each;every coordinate systems which used in geodesy science study, and geomatica of geoinformation.

H. Main Subject : Coordinate System.
I. Sub Main Subject :
   1. Explanation of elementary concept and understanding of coordinate systems
   2. Understanding and line co-ordinate application
   3. Understanding and co-ordinate application 2D.
### H. Lecturing Activity:

<table>
<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
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<tbody>
<tr>
<td>Introduction</td>
<td>1. Coordinate System explanation.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>2. Coordinate System Advantages Explanation.</td>
<td>2. Discuss</td>
<td>White Board</td>
</tr>
<tr>
<td></td>
<td>3. Competency Explanation TIU and TIK.</td>
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</tr>
<tr>
<td>Main</td>
<td>1. Explanation of elementary concept and understanding of coordinate systems</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>2. Understanding and line coordinate application</td>
<td>2. Discuss</td>
<td>White Board</td>
</tr>
<tr>
<td></td>
<td>3. Understanding and coordinate application 2D.</td>
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<tr>
<td>Closing</td>
<td>4. Summary subject which have been submitted.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>5. Give questions, discuss and homeworks.</td>
<td>2. Discuss</td>
<td>White Board</td>
</tr>
<tr>
<td></td>
<td>6. Give general explanation about the next material of subject.</td>
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</tbody>
</table>

### I. Evaluation:

Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

### J. Referensi:


Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 3

A. Target :
   1. General Instructional Target
      In final of lecturing expected by student to obtain knowledge and understanding of Coordinate System and also implementation with precisely.
   2. Specific Instructional Target
      After attending the lecture with Introduction Topic expected by student can:
      1. Formulating implementation and understanding of coordinate systems concept
      2. Can define and formulate each; every method determination of horizontal position
      3. Comprehending implementation from each; every coordinate systems which used in geodesy science study, and geomatica-geoinformation.

B. Main Subject : Coordinate System.

C. Sub Main Subject :
   1. Explanation of coordinate systems application and understanding of geographic
   2. Explanation of coordinate systems application and understanding of cartesian.

D. Lecturing Activity :

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<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
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<tr>
<td>Introduction</td>
<td>1. Coordinate System explanation.</td>
<td>1. Listening</td>
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<td></td>
<td>2. Coordinate System Advantages Explanation.</td>
<td>2. Discuss</td>
<td>OHT, White Board</td>
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<tr>
<td></td>
<td>3. Competency Explanation TIU and TIK.</td>
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<td>Main</td>
<td>1. Explanation of elementary</td>
<td>1. Listening</td>
<td>OHP,</td>
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<tr>
<th>Closing</th>
<th>Concept and understanding of coordinate systems</th>
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<tbody>
<tr>
<td></td>
<td>2. Understanding and line coordinate application</td>
</tr>
<tr>
<td></td>
<td>3. Understanding and coordinate application 2D.</td>
</tr>
</tbody>
</table>

1. Summary subject which have been submitted.
2. Give questions, discuss and homeworks.
3. Give general explanation about the next material of subject.

2. Discuss

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<tr>
<th></th>
<th>OHT, White Board</th>
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<tbody>
<tr>
<td>1. Listening</td>
<td>OHP, OHT, White Board</td>
</tr>
<tr>
<td>2. Discuss</td>
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</table>

E. Evaluation:
Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

F. Reference:


Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 4

A. Target :
   1. General Instructional Target
      In final of lecturing expected by student to obtain knowledge and understanding of
      Coordinate System and also implementation with precisely.
   2. Specific Instructional Target
      After attending the lecture with Introduction Topic expected by student can:
      1. Formulating implementation and understanding of coordinate systems concept
      2. Can define and formulate each;every method determination of horizontal position
      3. Comprehending implementation from each;every coordinate systems which used in
         geodesy science study, and geomatica of geoinformation.

B. Main Subject : Coordinate System.

C. Sub Main Subject :
   1. Explanation of geodetical coordinate systems application and understanding
   2. Explanation of coordinate systems application and understanding of geosentric
   3. Explanation of coordinate systems application and understanding of toposentric.

D. Lecturing Activity :

<table>
<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
<th>Media</th>
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<tbody>
<tr>
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<td>1. Listening</td>
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<tr>
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<td></td>
<td>3. Competency Explanation TIU and TIK.</td>
<td></td>
<td>White Board</td>
</tr>
<tr>
<td>Main</td>
<td>1. Explanation of geodetical coordinate systems</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
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<tr>
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<td></td>
<td>2. Discuss</td>
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<tr>
<td>Application and understanding</td>
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<tr>
<td>2. Explanation of coordinate systems application and understanding of geosentric</td>
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<td>3. Explanation of coordinate systems application and understanding of toposentric.</td>
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</table>

**Closing**

| 1. Summary subject which have been submitted. | 1. Listening |
| 2. Give questions, discuss and homeworks. | 2. Discuss |
| 3. Give general explanation about the next material of subject. | |

**E. Evaluation:**
Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

**F. Reference:**

Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 5

A. Target :
1. General Instructional Target
   In final of lecturing expected by student to obtain knowledge and understanding of Physic Geodesy and also implementation with precisely.

2. Specific Instructional Target
   After attending the lecture with Introduction Topic expected by student can:
   1. Understanding of geoid and ellipsoid related msl in geoid and ellipsoid
   2. Understanding of relation between 2 direction and also ball distance and azimuth
   3. Understanding of ball definition and notation cover transversally of geodesy line and longitude.

B. Main Subject : Physic Geodesy
C. Sub Main Subject :
   1. Understanding of geoid and ellipsoid related msl in geoid and ellipsoid
   2. Understanding of relation between 2 direction and also ball distance and azimuth

D. Lecturing Activity :

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<tr>
<th>Step</th>
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<th>Student Activity</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Prelecting Geodesy Advantages Explanation.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
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<tr>
<td></td>
<td>2. Physic Geodesy Compentency</td>
<td>2. Discuss</td>
<td>White Board</td>
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<td>3. Compeptency Explanasion TIU and TIK.</td>
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<table>
<thead>
<tr>
<th>Main</th>
<th>1. Understanding of geoid and ellipsoid related msl in geoid and ellipsoid</th>
<th>1. Listening</th>
<th>OHP, OHT, White Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing</td>
<td>2. Understanding of relation between 2 direction and also ball distance and azimuth</td>
<td>2. Discuss</td>
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<td></td>
<td>4. Summary subject which have been submitted.</td>
<td>1. Listening</td>
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<tr>
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E. Evaluation:

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F. Reference:


Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 6

A. Target :
   1. General Instructional Target
      In final of lecturing expected by student to obtain knowledge and understanding of
      Physic Geodesy and also implementation with precisely.
   2. Specific Instructional Target
      After attending the lecture with Physic Geodesy Topic expected by student can:
      1. Understanding of geoid and ellipsoid related msl with geoid and ellipsoid.
      2. Understanding of relation 2 direction and distance and azimuth ball.
      3. Understanding of ball definition and notation cover transversally of geodesic line
         and longitude.

C. Main Subject : Physic Geodesy
D. Sub Main Subject :
   1. Understanding of geoid and ellipsoid related msl in geoid and ellipsoid
   2. Understanding of relation between 2 direction and also ball distance and azimuth

E. Lecturing Activity :

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<tr>
<th>Step</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>1. Physic Geodesy explanation.</td>
<td>1. Listening</td>
<td>White Board</td>
</tr>
<tr>
<td></td>
<td>2. Physic Geodesy Advantages Explanation.</td>
<td>2. Discuss</td>
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<td></td>
<td>3. Competency Explanation TIU and TIK.</td>
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</tbody>
</table>

| Main   | 1. Understanding of geoid and ellipsoid related msl | 1. Listening     | OHP, OHT,      |
|        |                                                       | 2. Discuss      |                |
in geoid and ellipsoid
2. Understanding of relation between 2 direction and also distance and azimuth ball.

| Closing | 1. Summary subject which have been submitted.  
2. Give questions, discuss and homeworks.  
3. Give general explanation about the next material of subject. | 1. Listening  
2. Discuss | OHP, OHT, White Board |

F. Evaluation:
Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

G. Reference:


Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 7

A. Target :
   1. General Instructional Target
      In final of lecturing expected by student to obtain knowledge and understanding of
      Database System and also implementation with precisely.
   2. Spesific Instructional Target
      After attending the lecture with Introduction Topic expected by student can:
      1. Comprehending elementary concept and understanding of data base system.
      2. Can formulate data bases management system concept.
      3. Can explain assortedly of data bases system implementation.

C. Main Subject : Database System
D. Sub Main Subject :
   1. Explanation and understanding of elementary concept and understanding of data
      base system
   2. Explanation and understanding kinds of data bases system structure
   3. Explanation and understanding of advantage and disadvantage in data bases
      system.

E. Lecturing Activity :

<table>
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<tr>
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<td>1. Listening</td>
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<td>2. Discuss</td>
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<td></td>
<td>1. Database System explanation.</td>
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<td></td>
<td>3. Competency Explanation TIU and TIK.</td>
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<td>1. Explanation and</td>
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<table>
<thead>
<tr>
<th>Understanding of elementary concept and understanding of database system</th>
<th>2. Discuss</th>
<th>OHT, White Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Explanation and understanding kinds of data bases system structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Explanation and understanding of advantage and disadvantage in data bases system.</td>
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</table>

**Closing**

<table>
<thead>
<tr>
<th>1. Summary subject which have been submitted.</th>
<th>1. Listening</th>
<th>OHP, OHT, White Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Give questions, discuss and homeworks.</td>
<td>2. Discuss</td>
<td></td>
</tr>
<tr>
<td>3. Give general explanation about the next material of subject.</td>
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</table>

**F. Evaluation:**

Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

**G. Reference:**


Subject : Introduction of Geodesy

Subject Code : TGD 108-2 SKS

Meeting Time : 2x50 menit (100 Menit)

Week Meeting : 8

A. Target :
   1. General Instructional Target
      In final of lecturing expected by student to obtain knowledge and understanding of
      Introduction of Geodesy and also implementation with precisely.
   2. Specific Instructional Target
      After following test mid-term (UTS) expected that student can comprehend
      lecture’s topic which have been given since week first till week of ke-7.

B. Main Subject :

C. Sub Main Subject :

D. Lecturing Activity :

E. Evaluation :

F. Reference :

Subject : Introduction of Geodesy

Subject Code : TGD 108-2 SKS

Meeting Time : 2x50 menit (100 Menit)

Week Meeting : 9

A. Target :
   1. General Instructional Target
      In final of lecturing expected by student to obtain knowledge and understanding of
      Database System and also implementation with precisely.
   2. Specific Instructional Target
      After attending the lecture with Introduction Topic expected by student can:
1. Comprehending elementary concept and understanding of data base system.
2. Can formulate data bases management system concept.
3. Can explain assortedly of data bases system implementation.

B. Main Subject : Database System
C. Sub Main Subject :
   1. Explanation of concept three data bases system architecture scheme.
   2. Explanation of data bases system structure along with his implementation advantage and disadvantage.
   3. Explanation of applying of data bases structure implementation simply.

D. Lecturing Activity :

<table>
<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
<th>Media</th>
</tr>
</thead>
</table>
| Introduction | 1. Database System explanation.  
               3. Competency Explanation TIU and TIK. | 1. Listening  
               2. Discuss   | OHP, OHT, White Board |
| Main      | 1. Explanation of concept three data bases system architecture scheme.  
               2. Explanation of data bases system structure along with his implementation advantage and disadvantage.  
               3. Explanation of applying of data bases structure implementation simply. | 1. Listening  
               2. Discuss   | OHP, OHT, White Board |
| Closing   | 1. Summary subject which have been submitted.  
               2. Give questions, discuss | 1. Listening  
               2. Discuss   | OHP, OHT, White Board |
and homeworks.
3. Give general explanation about the next material of subject.

E. Evaluation:
Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

F. Reference:


Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 10

A. Target :
1. General Instructional Target
In final of lecturing expected by student to obtain knowledge and understanding of Database-System and also implementation with precisely.

2. Specific Instructional Target
After attending the lecture with Introduction Topic expected by student can:
   1. Comprehending elementary concept and understanding of data base system.
   2. Can formulate data bases management system concept.
   3. Can explain assortedly of data bases system implementation..

B. Main Subject : Database System
C. **Sub Main Subject:**

1. Explaining elementary concept of data bases management system
2. Explaining data bases management system structure
3. Explaining data bases management system implementation simply.

D. **Lecturing Activity:**

<table>
<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
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<tbody>
<tr>
<td>Introduction</td>
<td>1. Database System explanation.</td>
<td>1. Listening</td>
<td>OHP, OHT, White Board</td>
</tr>
<tr>
<td></td>
<td>2. Database System Advantages Explanation.</td>
<td>2. Discuss</td>
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</tr>
<tr>
<td></td>
<td>3. Competency Explanation TIU and TIK.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main</td>
<td>1. Explaining elementary concept of data bases management system</td>
<td>1. Listening</td>
<td>OHP, OHT, White Board</td>
</tr>
<tr>
<td></td>
<td>2. Explaining data bases management system structure</td>
<td>2. Discuss</td>
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</tr>
<tr>
<td></td>
<td>3. Explaining data bases management system implementation simply.</td>
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<tr>
<td>Closing</td>
<td>1. Summary subject which have been submitted.</td>
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E. **Evaluation:**

Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

F. **Reference:**

Subject : Introduction of Geodesy

Subject Code : TGD 108-2 SKS

Meeting Time : 2x50 menit (100 Menit)

Week Meeting : 11

B. Target :

1. General Instructional Target
   In final of lecturing expected by student to obtain knowledge and understanding of Geographical Information System and also implementation with precisely.

2. Specific Instructional Target
   After attending the lecture with Introduction Topic expected by student can:
   1. Understanding of Geographical Information System.
   2. Understanding of simple application of Geographical Information System.

B. Main Subject : Database System

C. Sub Main Subject :

1. Understanding of Geographical Information System.
2. Understanding of simple application of Geographical Information System.

D. Lecturing Activity :

<table>
<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
<th>Media</th>
</tr>
</thead>
</table>

20
| Main       | 1. Understanding of Geographical Information System.  
|           | 2. Understanding of simple application of Geographical Information System. |
| Closing   | 1. Summary subject which have been submitted.  
|           | 2. Give questions, discuss and homeworks.  
|           | 3. Give general explanation about the next material of subject. |
| OHP, OHT, White Board | 1. Listening  
|           | 2. Discuss |

E. Evaluation:

Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

F. Reference:


Subject: Introduction of Geodesy

Subject Code: TGD 108-2 SKS

Meeting Time: 2x50 menit (100 Menit)

Week Meeting: 12

C. Target:
1. General Instructional Target
   In final of lecturing expected by student to obtain knowledge and understanding of
   Geographical Information System and also implementation with precisely.

2. Specific Instructional Target
   After attending the lecture with Introduction Topic expected by student can:
   1. Understanding of Geographical Information System.
   2. Understanding of simple application of Geographical Information System.

B. Main Subject: Geographical Information System

C. Sub Main Subject:
   1. Understanding of simple application of Geographical Information System
   2. Explanation of path work Geographical Information System pursuant to elementary
      concept of Geodesy and Geomatica.

D. Lecturing Activity:

<table>
<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1. Geographical Information System (\text{Advantages Explanation.})</td>
<td>1. Listening 2. Discuss</td>
<td>OHP, OHT, White Board</td>
</tr>
<tr>
<td></td>
<td>2. Geographical Information System 3. Competency Explanation TIU and TIK.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main</td>
<td>1. Understanding of simple application Geographical Information</td>
<td>1. Listening 2. Discuss</td>
<td>OHP, OHT, White Board</td>
</tr>
<tr>
<td>System</td>
<td></td>
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<td>--------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Explanation of path work</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographical Information</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System pursuant to elementary concept of Geodesy and Geomatica.</td>
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<td></td>
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<tr>
<td>Board</td>
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<tr>
<td>Closing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Summary subject which have been submitted.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Give questions, discuss and homeworks.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Give general explanation about the next material of subject.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Listening</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Discuss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OHP, OHT, White Board</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

E. Evaluation:

Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

F. Reference:


Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 13

A. Target :
1. General Instructional Target
   In final of lecturing expected by student to obtain knowledge and understanding of
   Geographical Information System and also implementation with precisely.
2. Specific Instructional Target
   After attending the lecture with Introduction Topic expected by student can:
   1. Understanding of Geographical Information System.
   2. Understanding of simple application of Geographical Information System.

B. Main Subject : Geographical Information System

C. Sub Main Subject :
1. Explaining digital mapping interaction and data bases system pursuant to concept
   of geocoding
2. Explaining geographical information system implementation with remote sensing,
   digital mapping and database system.

D. Lecturing Activity :

<table>
<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
<th>Media</th>
</tr>
</thead>
</table>
               3. Competency Explanation TIU and TIK. | 1. Listening  
                                                                   2. Discuss | OHP, OHT, White Board |
| Main    | 1. Explaining digital mapping interaction and data bases | 1. Listening  
                                                                   2. Discuss | OHP, OHT, |
| Closing | 1. Summary subject which have been submitted.  
2. Give questions, discuss and homeworks.  
3. Give general explanation about the next material of subject. | 1. Listening  
2. Discuss | OHP, OHT, White Board |

E. Evaluation:

Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

F. Reference:


Subject : Introduction of Geodesy

Subject Code : TGD 108-2 SKS

Meeting Time : 2x50 menit (100 Menit)

Week Meeting : 14

A. Target :

1. General Instructional Target

   In final of lecturing expected by student to obtain knowledge and understanding of
   Remote Sensing and also implementation with precisely.

2. Specific Instructional Target

   After attending the lecture with Introduction Topic expected by student can:
   
   1. Understanding and elementary concept of remote sensing.
   2. Understanding and application from remote sensing satellite system.

B. Main Subject : Remote Sensing

C. Sub Main Subject :

   1. Understanding and elementary concept of remote sensing.
   2. Understanding and application from remote sensing satellite system.

D. Lecturing Activity :

<table>
<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1. Remote Sensing explanation.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>2. Remote Sensing Advantages Explanation.</td>
<td>2. Discuss</td>
<td>White Board</td>
</tr>
<tr>
<td></td>
<td>3. Competency Explanation TIU and TIK.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main</td>
<td>1. Understanding and elementary concept of remote sensing.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>2. Understanding and application from remote</td>
<td>2. Discuss</td>
<td>White Board</td>
</tr>
</tbody>
</table>

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| Closing | 1. Summary subject which have been submitted.  
2. Give questions, discuss and homeworks.  
3. Give general explanation about the next material of subject. | 1. Listening  
2. Discuss | OHP, OHT, White Board |

E. Evaluation:

Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

F. Reference:


Subject : Introduction of Geodesy
Subject Code : TGD 108-2 SKS
Meeting Time : 2x50 menit (100 Menit)
Week Meeting : 15

A. Target :

1. General Instructional Target
   In final of lecturing expected by student to obtain knowledge and understanding of Remote Sensing and also implementation with precisely.

2. Specific Instructional Target
   After attending the lecture with Introduction Topic expected by student can:
1. Understanding and elementary concept of remote sensing.

2. Understanding and application from remote sensing satellite system.

B. Main Subject: Remote Sensing

C. Sub Main Subject:
   1. Explanation kinds of resolution which there are in remote sensing system.
   2. Explanation of growth of remote sensing technology nowadays.

D. Lecturing Activity:

<table>
<thead>
<tr>
<th>Step</th>
<th>Lecturing Activity</th>
<th>Student Activity</th>
<th>Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1. Remote Sensing explanation.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
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<tr>
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<td>2. Remote Sensing Advantages Explanation.</td>
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</tr>
<tr>
<td></td>
<td>3. Competency Explanation TIU and TIK.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main</td>
<td>1. Explanation kinds of resolution which there are in remote sensing system.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>2. Explanation of growth of remote sensing technology nowadays.</td>
<td>2. Discuss</td>
<td>White Board</td>
</tr>
<tr>
<td>Closing</td>
<td>1. Summary subject which have been submitted.</td>
<td>1. Listening</td>
<td>OHP, OHT,</td>
</tr>
<tr>
<td></td>
<td>2. Give questions, discuss and homeworks.</td>
<td>2. Discuss</td>
<td>White Board</td>
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<tr>
<td></td>
<td>3. Give general explanation about the next material of subject.</td>
<td></td>
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E. Evaluation:

Make discussion and question-answer together to understand about student knowledge understanding onto subject material.

F. Reference:

Subject : Introduction of Geodesy

Subject Code : TGD 108-2 SKS

Meeting Time : 2x50 menit (100 Menit)

Week Meeting : 16

A. Target :

1. General Instructional Target
   In final of lecturing expected by student to obtain knowledge and understanding of
   Introduction of Geodesy and also implementation with precisely.

2. Specific Instructional Target
   After following Final Test (UAS) expected that student can comprehend lecture’s
   topic which have been given since week first till week of ke-16.

B. Main Subject :

C. Sub Main Subject: -

D. Lecturing Activity : -

E. Evaluation: -

F. Reference: -