



# Satuan Acara Pengajaran

MMK8110801 - Prinsip Korosi

Pengajar

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## Minggu 1

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**Materi** Introduction :  
- Definition , Form of Corrosion  
- Electrochemical Aspect of Corrosion  
- Thermodynamic of Corrosion

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**Media** power point

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**Referensi** Jones, Principles and Prevention of Corrosion, Ch 1  
Fontana, Corrosion Engineering, Ch 1

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**Aktivitas**

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## Minggu 2

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**Materi** Thermodynamics of Corrosion:  
- Electrode Potentials  
- Pourbaix Diagrams and applications

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**Media** Laptop, LCD :power point  
White Board

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**Referensi** Jones : Ch 2  
Fontana

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**Aktivitas** lecturing  
discussion

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## Minggu 3

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**Materi** Kinetics of Corrosion:  
- Polarization  
- Passivity

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**Media** Lap top, LCD, White Board

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**Referensi** Jones ; ch 3

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**Aktivitas** Lecturing  
Discussion

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## Minggu 4

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**Materi** Potensial dan Mixed Potensial

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**Media** LCD, Lap Top, WB

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**Referensi** Fontana ; ch 9, 10

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**Aktivitas** lecture, excercise,

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## Minggu 5

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**Materi** Visiting Lecturer from SANDVIK  
-material selection

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**Media** LCD

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**Referensi**

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**Aktivitas** presentation

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## Minggu 6

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**Materi** Types of corrosion  
- electrochemical affect

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**Media** LCD

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**Referensi** Hand Book Corosion ASTM 13

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**Aktivitas**      discussion

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## Minggu 7

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**Materi**            types of corrosion 2  
                         -meccanical effect

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**Media**             LCD

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**Referensi**        HB vol 13

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**Aktivitas**        discussion  
                         case study

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## Minggu 8

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**Materi**            Mid Test

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**Media**

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**Referensi**

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**Aktivitas**

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## Minggu 9

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**Materi**            Corrosion Testing :  
                         - standards (NACE, ASTM)

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**Media**

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**Referensi**

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**Aktivitas**

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## Minggu 10

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**Materi**            Basic theory of Corrosion Protection 1:  
                         - Inhibitor  
                         - coating

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**Media**

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**Referensi** Sastri, Inhibitor

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**Aktivitas** Discussion

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## Minggu 11

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**Materi** Basic Theory of Corrosion Protection 2:  
- Material selection, design  
-cathodic protection

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**Media**

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**Referensi** Peabody (Cathodic Protection)  
Gupta , Material Selection

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**Aktivitas**

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## Minggu 12

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**Materi** Students Presentation  
(individual case study)

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**Media**

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**Referensi**

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**Aktivitas**

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## Minggu 13

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**Materi** Students Presentation  
case study

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**Media**

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**Referensi**

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**Aktivitas**

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## Minggu 14

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**Materi** Final Examination

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**Media**

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**Referensi**

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**Aktivitas**

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