



# Satuan Acara Pengajaran

ENMS802003 - Simulasi Jaringan Berbasis Komputer

Pengajar

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## Minggu 1

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<b>Materi</b>	Introduction
<b>Media</b>	OHP
<b>Referensi</b>	Computer Networking, A Top-Down Approach Featuring the Internet, J. F. Kurose and K. W. Ross, Addison Wesley, 2003
<b>Aktivitas</b>	Kuliah dan diskusi

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## Minggu 2

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<b>Materi</b>	Linux Installation
<b>Media</b>	LCD
<b>Referensi</b>	Linux Distribution
<b>Aktivitas</b>	Praktek Instalasai

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## Minggu 3

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<b>Materi</b>	NS Installation
<b>Media</b>	LCD
<b>Referensi</b>	<a href="http://www.isi.edu/nsnam">www.isi.edu/nsnam</a>

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**Aktivitas** Install NS

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## Minggu 4

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**Materi** Network Simulation Fundamentals

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**Media** LCD

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**Referensi** Handout 1 (gaia)  
Brakmo & Peterson paper

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**Aktivitas** Kuliah dan Diskusi

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## Minggu 5

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**Materi** The Basic of NS (1):  
OTCL, Simple Simulation example (topology, events, marking flows,  
monitoring a queue).  
Architecture (nodes, links, applications, protocols, packets, loss modules, math  
support)

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**Media** LCD

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**Referensi** Ns by example

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**Aktivitas** Kuliah dan praktek

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## Minggu 6

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**Materi** The Basic of NS (2):  
Event Scheduler, Network Components, Packet

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**Media**

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**Referensi** Ns by example

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**Aktivitas**

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## Minggu 7

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**Materi** Project Presentation

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**Media**

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**Referensi**

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**Aktivitas**

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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** Post Simulation:  
Analysing ns trace file, Queue Monitor (examples)

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**Media**

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**Referensi** Raj Jain

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**Aktivitas**

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Minggu 10

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**Materi** Best Practice in Network Performance Evaluation Techniques

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**Media**

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**Referensi** Varadhan

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**Aktivitas**

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Minggu 11

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**Materi** Ns topology generation, OTCL and C++, routing (unicast, multicast, network dynamics), multicast transport

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**Media**

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**Referensi** J. Widmer

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**Aktivitas**

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## Minggu 12

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**Materi** NAM network animator, further features (abstraction, multicast, RTP/RTCP, SRM, QoS, Scenario generation, test suites)

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**Media**

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**Referensi** Ns by example

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**Aktivitas**

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## Minggu 13

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**Materi** Extending ns:  
Ns structure, OTCL linkage, Add new application and agent, add new queue

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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** A New Protocol for ns:  
Header file, C++ code, necessary changes, the TCL code

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**Media**

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**Referensi**

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**Aktivitas**

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## Minggu 15

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**Materi** Final Test and Paper presentation

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**Media**

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**Referensi**

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**Aktivitas**

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Minggu 16

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**Materi**      Final Test

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**Media**

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**Referensi**

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**Aktivitas**

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