

	Jurusan Teknik Sipil FT UNS	No. Dokumen	F-TKS-20.01
		Revisi ke	0
Judul :	Dokumen level 4: REKAMAN SILABUS	Tgl. berlaku	17 Februari 2012
		Halaman	2 / 7

Jurusan : Teknik Sipil
 Kompetensi Lulusan : Penguasaan keilmuan (dalam penerapan pengetahuan dasar keteknik-sipilan ke dalam kegiatan perencanaan, perancangan, pengelolaan, dan pemecahan masalah teknik sipil)
 Bahan Kajian : Ketrampilan dan keahlian
 Kode Mata Kuliah :
 Mata Kuliah : Rekayasa Gempa
 Bobot : 2 SKS
 Semester :
 Standart Kompetensi : Mahasiswa dapat menerapkan cara merencanakan gedung tahan Gempa.
 Mata Kuliah Prasyarat : -

Kompetensi Dasar	Indikator	Pengalaman Belajar	Materi Pokok	Alokasi Waktu (menit)	Sumber/ Bahan/Alat	Penilaian
<i>Mhs dpt mengetahui perkembangan pengetahuan gempa terkini</i> (Kompetensi Dasar 1)	<i>Dapat mengetahui perkembangan pengetahuan gempa terkini</i>	Diskusi tentang pengetahuan gempa	pengetahuan gempa	3x2x45'	Boen, T., Wendy, T., 1990, <i>Dasar-dasar Perhitungan Bangunan Tahan Gempa</i> , Puslitbang PU, Dep.PU, Jakarta. Chopra, A.K., 1995, <i>Dynamic of Structures: Theory & Application to Earthquake</i> , Prentice	Ujian tertulis

					<p>Hall, Englewood Cliffs, New Jersey. FEMA 302 (2), 1998, NEHERP Recommended Provision for Seismic Regulation for New Building & Structures, 1st.ed. Housner, G.W., Jenning, P.C., 1982, Earthquake Design Criteria, The Earthquake Engineering Research Institute, California. Lindenburg, M.R., & Baradar, M., 2001, Seismic Design of Building Structures, 8th.ed., Professional Publications, Belmont, CA. Newmark, N.M & Hall, W.J., 1982, Earthquake Spectra & Design, The Earthquake Engineering Research Institute, California SNI 03-1726-2002, Tata Cara Perencanaan Ketahanan Gempa untuk Bangunan Gedung, Badan Standardisasi Nasional. Tavio & Kusuma, B., 2009, Desain SRPM & Dinding Struktur Beton Bertulang Tahan Gempa, cet.1, ITS Press Surabaya. UBC, 1997, <i>Structural</i></p>	
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					<p><i>Engineering Design Provisions</i>, International Conference of Building Officials, April 1997, 2nd.ed. <i>Wakabayashi, M., 1986. Design of Earthquake Resistant Buildings</i>, McGraw-Hill. <i>Widodo, 2001, Respon Dinamik Struktur Elastik</i>, UII Press, ed.1., Yogyakarta.</p>	
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Kompetensi Dasar	Indikator	Pengalaman Belajar	Materi Pokok	Alokasi Waktu (menit)	Sumber/ Bahan/Alat	Penilaian
Mhs dpt memahami dasar-dasar beban gempa (Kopentensi Dasar 2)	Dapat memahami dasar-dasar beban gempa	Diskusi tentang beban gempa	beban gempa	3x2x45'	<p>Boen, T., Wendy, T., 1990, <i>Dasar-dasar Perhitungan Bangunan Tahan Gempa</i>, Puslitbang PU, Dep.PU, Jakarta. Chopra, A.K., 1995, <i>Dynamic of Structures: Theory & Application to Earthquake</i>, Prentice Hall, Englewood Clifs, New Yersey. FEMA 302 (2), 1998, NEHERP</p>	Ujian tertulis

					<p>Recommended Provision for Seismic Regulation for New Building & Structures, 1st.ed. Housner,G.W., Jennings,P.C., 1982, Earthquake Design Criteria, The Earthquake Engineering Research Institute, California. Lindeburg,M.R., & Baradar, M., 2001, Seismic Design of Building Structures, 8th.ed., Professional Publications, Belmont, CA. Newmark, N.M & Hall, W.J., 1982, Earthquake Spectra & Design, The Earthquake Engineering Research Institute, California SNI 03-1726-2002, Tata Cara Perencanaan Ketahanan Gempa untuk Bangunan Gedung, Badan Standardisasi Nasional.</p>	
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					<p>Tavio & Kusuma, B., 2009, Desain SRPM & Dinding Struktur Beton Bertulang Tahan Gempa, cet. 1, ITS Press Surabaya.</p> <p>UBC, 1997, <i>Structural Engineering Design Provisions</i>, International Conference of Building Officials, April 1997, 2nd.ed.</p> <p>Wakabayashi, M., 1986. Design of Earthquake Resistant Buildings, McGraw-Hill.</p> <p>Widodo, 2001, Respon Dinamik Struktur Elastik, UII Press, ed.1., Yogyakarta.</p>	
<p>Mhs dpt melakukan desain bangunan penahan gempa dng pedoman SNI 03-1726-2002 (Kopentensi Dasar 3)</p>	<p>Dapat melakukan desain bangunan penahan gempa dng pedoman SNI 03-1726-2002</p>	<p>Diskusi tentang peta gempa, faktor keutamaan gempa, katagori resiko gempa.</p>	<p>peta gempa, faktor keutamaan gempa, katagori resiko gempa.</p>	<p>3x2x45'</p>	<p>Boen, T., Wendy, T., 1990, <i>Dasar-dasar Perhitungan Bangunan Tahan Gempa</i>, Puslitbang PU, Dep.PU, Jakarta.</p> <p>Chopra, A.K., 1995, <i>Dynamic of Structures: Theory & Application to</i></p>	<p>Ujian tertulis</p>

					<p>Earthquake, Prentice Hall, Englewood Cliffs, New Jersey. FEMA 302 (2), 1998, NEHERP Recommended Provision for Seismic Regulation for New Building & Structures, 1st.ed. Housner, G.W., Jenning, P.C., 1982, Earthquake Design Criteria, The Earthquake Engineering Research Institute, California. Lindeburg, M.R., & Baradar, M., 2001, Seismic Design of Building Structures, 8th.ed., Professional Publications, Belmont, CA. Newmark, N.M & Hall, W.J., 1982, Earthquake Spectra & Design, The Earthquake Engineering Research Institute, California SNI 03-1726- 2002, Tata Cara Perencanaan</p>	
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					<p>Ketahanan Gempa untuk Bangunan Gedung, <i>Badan Standardisasi Nasional</i>.</p> <p>Tavio & Kusuma, B., 2009, <i>Desain SRPM & Dinding Struktur Beton Bertulang Tahan Gempa, cet.1, ITS Press Surabaya</i>.</p> <p>UBC, 1997, <i>Structural Engineering Design Provisions</i>, International Conference of Building Officials, April 1997, 2nd.ed.</p> <p>Wakabayashi, M., 1986. <i>Design of Earthquake Resistant Buildings</i>, McGraw-Hill.</p> <p>Widodo, 2001, <i>Respon Dinamik Struktur Elastik</i>, UII Press, ed.1., Yogyakarta.</p>	
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<p>Mhs dpt melakukan desain bangunan penahan gempa dng metoda <u>Statik Ekuivalen</u> (Kopetensi Dasar 4)</p>	<p><i>Dapat melakukan desain bangunan penahan gempa dng metoda <u>Statik Ekuivalen</u></i></p>	<p>Diskusi tentang gaya dasar gempa dan pembagiannya tiap lantai.</p>	<p>gaya dasar gempa dan pembagiannya tiap lantai.</p>	<p>3x2x45'</p>	<p>Boen,T., Wendy, T.,1990, <i>Dasar-dasar Perhitungan Bangunan Tahan Gempa</i>, Puslitbang PU, Dep.PU, Jakarta. Chopra, A.K., 1995, <i>Dynamic of Structures: Theory & Aplication to Earthquake</i>, Prentice Hall, Englewood Clifs, New Yersey. FEMA 302 (2), 1998, <i>NEHERP Recommended Provision for Seismic Regulation for New Building & Structures</i>, 1st.ed. Housner,G.W., Jennings,P.C., 1982, <i>Earthquake Design Criteria</i>, <i>The Earthquake Engineering Research Institute</i>, California. Lindeburg,M.R.,& Baradar, M., 2001, <i>Seismic Design of Building Structures</i>, 8th.ed., <i>Professional</i></p>	<p>Ujian tertulis</p>
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					McGraw-Hill. Widodo, 2001 , Respon Dinamik Struktur Elastik, UII Press, ed.1., Yogyakarta.	
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BOBOT PENILAIAN

$$\text{Nilai Akhir} = (\text{KD1} + \text{KD2} + \text{KD3} + \text{KD4}) / 4$$

KRITERIA PENILAIAN

Penilaian dilakukan dengan metode PAP dengan konversi ke nilai angka dan huruf sesuai dengan tabel berikut

Tabel konversi nilai

Rentang skala	Nilai angka	Nilai huruf	kualifikasi
80 – 100	4	A	Lulus
70 – 79	3	B	Lulus
60 – 69	2	C	Lulus
40 – 59	1	D	Tidak lulus
39 - 0	0	E	Tidak lulus

Disiapkan	Diperiksa	Disahkan
Koordinator Pengampu MK	PKJ1	Ketua Jurusan