Satuan Acara Pengajaran

ENMT800103 - Komposit Lanjut

Pengajar
Prof. Dr. Ir. Dedi Priadi DEA.

Tujuan Perkuliahan

Mahasiswa mampu menjelaskan material komposit, perkembangan dan aplikasinya serta mampu menghitung sifat mekanik dan fisik dari komposit dengan menggunakan rumus hukum campuran. (Rule of Mixture).

Minggu 1

Materi	Pengenalan SAP Konsep, definisi dan klasifikasi komposit
Media	Powerpoint
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 2

Materi	Lanjutan Definisi, konsep, klasifikasi dan penggunaan material komposit

Media	Powerpoint
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 3

Materi	Pemahaman tentang matriks dan penguat dalam material komposit. Jenis matriks dan penguat
Media	Powerpoint
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 4

Materi	Jenis-jenis penguat, kelebihan dan kekurangan, persyaratan material penguat
Media	Powerpoint
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999

Aktivitas	

Minggu 5

Materi	Ikatan antar permukaan dalam komposit. Persyaratan dan teknik-teknik pencampuran
Media	Powerpoint
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 6

Materi	Latihan soal topik-topik yang telah diberikan Pengenalan komposit polimer
Media	
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 7

Materi	Lanjutan Komposit Polimer. Kelebihan, kekurangan serta aplikasinya
Media	Powerpoint

Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 8

Materi	Ujian Tengah Semester
Media	
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 9

Materi	Hukum campuran
Media	
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 10

Materi	Pengenalan sifat dan aplikasinya komposit matriks logam
Media	Powerpoint
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 11

Materi	Lanjutan Komposit Matriks Logam Latihan soal
Media	Powerpoint
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 12

Materi	Pengenalan sifat dan aplikasinya Komposit Matriks Keramik
Media	Powerpoint

Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 13

Materi	Lanjutan dan latihan soal Keramik Matriks Keramaik
Media	Powerpoint
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	Diskusi latihan soal

Minggu 14

Materi	Pengenalan sifat dan aplikasi Bio Komposit
Media	Powerpoint
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	

Minggu 15

Materi	Latihan soal untuk persiapan UAS
Media	
Referensi	1. Hull, D., An Introdution to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
Aktivitas	Diskusi dan pemaparan tugas masing-masing mahasiswa

Minggu 16

Materi	Ujian Akhir Semester
Media	
Referensi	
Aktivitas	