



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 Introduction to composite Materials, Cambridge Uni. Press, 1981
2. Matthew, 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 Introduction to composite Materials, Cambridge Uni. Press, 1981
 2. Matthew, 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
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Aktivitas

Minggu 3

Materi Pemahaman tentang matriks dan penguat dalam material komposit. Jenis matriks dan penguat

Media Powerpoint

- Referensi**
1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981
 2. Matthew, 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
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Aktivitas

Minggu 4

Materi Jenis-jenis penguat, kelebihan dan kekurangan, persyaratan material penguat

Media Powerpoint

- Referensi**
1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981
 2. Matthew, 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
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Aktivitas

Minggu 5

Materi Ikatan antar permukaan dalam komposit. Persyaratan dan teknik-teknik pencampuran

Media Powerpoint

Referensi

1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981
2. Matthew, 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 Introduction to composite Materials, Cambridge Uni. Press, 1981
2. Matthew, 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 Introduction 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 Introduction 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 Introduction 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 Introduction to composite Materials, Cambridge Uni. Press, 1981
2. Matthew, 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 Introduction to composite Materials, Cambridge Uni. Press, 1981
2. Matthew, 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 Introduction to composite Materials, Cambridge Uni. Press, 1981
 2. Matthew, 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
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Aktivitas

Minggu 13

Materi Lanjutan dan latihan soal Keramik Matriks Keramaik

Media Powerpoint

- Referensi**
1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981
 2. Matthew, 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
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Aktivitas Diskusi latihan soal

Minggu 14

Materi Pengenalan sifat dan aplikasi Bio Komposit

Media Powerpoint

- Referensi**
1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981
 2. Matthew, 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 Introduction 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
