

FOOD CHEMISTRY

Semester Genap 2010/2011

Objectives

This subject is designed to provide the foundations of food chemistry. After completion, students will be able to:

- describe the structure, composition, nutritional and functional properties of food components
- identify the influence of storage and processing on the properties of food and its components
- identify essential nutritional requirements for health

What is food chemistry?

- Food chemistry deals with the composition and properties of food and the chemical changes it undergoes during handling, processing and storage.
- Food chemistry is intimately related to chemistry, biochemistry, physiological chemistry, botany, zoology and molecular biology.

Syllabi of Food Chemistry

- | | | |
|-----|----------------------------|------|
| 1. | Introduction | Inne |
| 2. | Enzyme | Inne |
| 3. | Vitamin 1 | Inne |
| 4. | Vitamin 2 | Inne |
| 5. | Pigment | Inne |
| 6. | Mineral | Inne |
| 7. | Interesting food additives | Inne |
| 8. | Ice and Water | Ita |
| 9. | Carbohydrates 1 | Ita |
| 10. | Lipids 1 | Ita |
| 11. | Lipids 2 | Ita |
| 12. | Amino acid – protein 1 | Ita |
| 13. | Amino acid – protein 2 | Ita |
| 14. | Flavor | Ita |

References

- Fennema, O.W. (1985). Food Chemistry.
- Fox, P.F. (1996). Food Enzymology.
- Lewis, R.J. (1997). Food Additives Handbook.
- Potter, N.N. & J.H. Hotchkiss. (1996). Food Science.
- Winarno, F.G. (1996). Kimia Pangan dan Gizi.

Evaluasi

- UTS: 35%
- UAS: 35%
- Presentasi: 15%
- Paper assignment: 15%

GROUP TASK

- Pagi 60 mhs & Siang 57 mhs @5 org (24 grup)
- *Paper* & presentasi sesuai materi perkuliahan hari terkait, dibatasi dosen pengampu (Ibu Inneke/Ita)
- *Outline* untuk *paper* & presentasi – suatu komponen bahan pangan: Definisi, karakteristik, struktur kimiawi, sumber bahan pangan, pengaruh penyimpanan dan beberapa perlakuan pengolahan pangan terhadap komponen tersebut, pustaka (min. dua *handbook/textbook* dan dua jurnal ilmiah)

Paper Assignment

- Dikerjakan secara kelompok.
- Panjang tulisan maksimal 6 lembar (tidak termasuk cover) – font 12 Times New Roman atau sejenis, spasi 1,5 dan diberi nomor halaman, serta diprint pada kertas A4 dengan margin 3 cm untuk semua tepi.
- Isi paper (lihat point – point isi untuk tugas presentasi)
- Mencantumkan sitasi dalam teks.
- Ada daftar pustaka pada bagian paling belakang, 1 SPASI
- Dikumpulkan pada di kelas saat membahas topik terkait (setelah presentasi)

Cover

Tugas Kimia Pangan (font 14)
Judul (font 16)

Nama Penulis (font 14)
NIM (font 14)

Logo

Program Studi Teknologi Pangan (font 14)
Unika Soegijapranata (font 14)
2011 (font 14)