COURSE CONTENT

Date : April 2nd 2012

Academic Year : 2012/13

Study Year (if applicable) : N/A

Course Code & Title : CM9101 Food Chemistry and Nutrition (3 AU)

Academic Units : 3 AU

Pre-requisites : CM1051 and (CM1031 or CM9001) or (CBC113 and CBC121) or by permission

Course Description

CM9101 Food Chemistry and Nutrition
[Lectures 26; Laboratory 30; pre-requisite CM1051 and CM1031 or CM9001 or CBC121 and CBC113 or by permission, academic units: 3]

Content
Structure, properties and chemistry of food components (water, carbohydrates, proteins, lipids, other nutrients, food additives). The chemistry of changes occurring during processing storage and utilization. The importance of these food components for human nutrition and their role in metabolism. Food additives, including colourings.

Learning Objectives
To outline the role of chemistry in the properties and processing of food, the importance (or lack of) for human nutrition.

Course Outline

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<th>S/N</th>
<th>Topic</th>
<th>Lecture Hours</th>
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<tr>
<td>1</td>
<td>Introduction to food chemistry and nutrition</td>
<td>2</td>
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<td>2</td>
<td>Water content and water activity</td>
<td>3</td>
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<td>Proteins in food and production of tofu and cheese</td>
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<td>Carbohydrates in food and dietary fiber</td>
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<td>5</td>
<td>Lipids in food and fat substitutes</td>
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<td>6</td>
<td>Food Colorants and browning</td>
<td>4</td>
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<tr>
<td>7</td>
<td>Special topics</td>
<td>2</td>
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Learning Outcomes
Students will understand the importance of the major chemical constituents of food and the changes that occur during processing. Students will also understand the role of these different components in human nutrition. Students will acquire basic laboratory skills related to food chemistry.

Student Assessment:
Students will be assessed by
a. 2 hours written final exam (50%)
b. Continuous assessment including laboratory report (50%)

Textbook: