處理學期(Current Semester)：1091

請尊重智慧財產權，請勿非法影印

1091學期所開設課程『食品發酵技術與開發功能性食品』的課程內容

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| 課程代碼(Course Number) | B390440G |
| 授課老師(Instructor) | 陳建利(Chien-Li Chen) |
| 中文課名(Chinese Course Title) | 食品發酵技術與開發功能性食品 |
| 英文課名(English Course Title) | Food Fermentation Technology and Development of Fu |
| 開課年班(Grade and Class) | 4A |
| 選課人數(Quantity) | 1 |
| 選課類別(Course Type) | 選修(Elective Course) |
| 上課時間(Course Meeting Days/Times) | 202,203,204 |
| 上課地點(Classroom) | MFE207,MFE207,MFE207 |
| 開課系所(Department/Institute Office of Course) | 食品科學系食品科學組(Food Science, Division of Fo |
| 學分(Credit(s)) 3 | 時數(Course Hour(s)) 3 |
| 人數上限(Maximum Number of Students) 50 | 人數下限(Minimum Number of Students) 10 |
| 開課期別(Course Type) | 單學期(semester course) |
| 是否實習 | 否 |
| 備註(Note) | |

## 課程綱要

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| 教學目標 Objective | 中 文 | 介紹食品工業之發展現況及展望。並瞭解近年來發展或流行的食品加工技術及應用，探討特定保健功能產品及其在保健食品的開發。 |
| | English | Introducing the development and prospect of food industry as well as teaching students to realize the identification, principle and application of novel or alternative food processing. To investigate of specific functional food products and its application of new functional food |
| 先修科目 Pre Course | 中 文 | 微生物學 |
| | English | |
| 教材內容 Outline | 中 文 | 1. 瞭解微生物在發酵製程的應用和發酵製程操作的調控。<br>2. 發酵和發酵微生物<br>2.1食物發酵<br>2.2發酵食品：古老的傳統<br>2.3影響發酵的因素<br>2.4負責食品發酵的生物製劑<br>3. 介紹健康食品及法規.<br>4. 明瞭健康食品功能評估方法. |
| | English | 1. Understand the microbial application in the fermentation and the operation regulation of fermentation process.<br>2. Fermentation and Fermenting Microorganisms<br>2.1 Food Fermentation<br>2.2 Fermented Foods: An ancient Tradition<br>2.3 Factors Influencing Fermentation<br>2.4 Biological Agents Responsible in Food Fermentation<br>3. To introduce of functional food and its regulation law.<br>4. To understand the assessment methods for functional food. |
| 教學方式 Teaching Method | 中 文 | 每週三小時課堂講解、討論、視聽授課 |
| | English | Three hours oral, discussion or audiovisual teaching per week) |

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| 參考書目 | 中 文 | （1）生物技術的基礎和應用。<br>（2）食品發酵於生產中應用之生物技術。<br>（3）酵素在食品工業中的應用。<br>（4）機能性食品開發與應用。 |
| Reference | English | (1) Fundamental and application of biotechnology.<br>(2) Biotechnology in fermentation and food production.<br>(3) Application of enzymes in food processing.<br>(4) Development and application of functional food. |
| 教學進度 | 中 文 | 1. 保健食品簡介<br>2. 健康食品相關法規<br>3. 健康食品的安全性評估<br>4. 調整血脂、血糖健康食品及其功能評估方法<br>5. 免疫調節及調整過敏體質之健康食品及其評估方法<br>6. 延緩衰老之健康食品及的功能評估方法<br>7. 護肝、抗疲勞健康食品及其功能評估方法<br>8. 胃腸功能改善健康食品及其功能評估方法<br>9. 特定保健功能產品開發 |
| Syllabus | English | 1. Introduction to special topics in functional food<br>2. Health food regulation<br>3. Extraction、separation and purification of functional foods<br>4. Evaluation methods of blood lipids and glucose on functional foods<br>5. Evaluation methods of immune and allergic regulation on functional foods<br>6. Evaluation methods of anti - aging on functional foods<br>7. Evaluation methods of liver protection and, anti-fatigue on functional foods<br>8. Evaluation methods of improving gastrointestinal function on functional foods<br>9. New functional food development methods |
| 評量方式 | 中 文 | 平時成績(40%，含測驗、報告、上課態度)、期中與期末考(各30%)。 |
| Evaluation | English | Quiz & report—40%, midterm examination—30%, finals—30% |
| 參考網址 | | |