**Shyama Prasad Mukherji College for Women**

**Teaching Plan**

**Course and Year:** B.A. Programme and 3rd year

**Semester:** V

**Taught individually or shared:** Individually

**Paper: Advanced Baking Technology Theory**

**Faculty:** Dr. Shivanki Aggarwal

**No. of Classes** (per week)**:** 04

**COURSE OBJECTIVES:**

• To equip students with knowledge related to baking technology.

To impart students with knowledge related to processing of breads, biscuits and cookies.

• To familiarize them with basics of food packaging, marketing and cost control.

**COURSE LEARNING OUTCOMES**:

• Describe the role of ingredients and steps of preparation of bread and biscuits.

• Illustrate techniques of marketing and cost control.

• Compare various food packaging materials and their characteristics.

• Justify label regulations and need for nutritional labeling.

**COMPULSORY READING**:

• Dubey S. C. (2016). Basic Baking: Science and Craft. Delhi: The Society of Indian Bakers.

• Dubey S. C. (2009). Bakery Vigyan. Delhi: The Society of Indian Bakers.

• Matz A. (2008). Bakery Technology and Engineering. 10th Edition. Delhi: CBS Publishers.

**ADDITIONAL RESOURCES**:

• Athalye, A.S. (1992). Plastics in Food Packaging. Delhi: Tata McGraw Hill Publishing Company.

• Booth, G.R. (2003). Snack Foods. Delhi: CBS Publishers.

• Faridi, H. (2004). The Science of Cookie and Crackers Production. Delhi: CBS Publishers.

• Griffin, S. (1997). Principles of Food Packaging. Connecticut: The AVI Publishing Company.

• Ketrapaul, N., Grewal, R.B., Jood, S. (2005). Bakery Science and Cereal Technology. Delhi: Daya Publishing House.

• Khanna, K., Gupta, S., Seth, R., Mahana, R., & Rekhi, T. (2004). The Art and Science of Cooking. Delhi: Phoenix Publishing House Private Limited.

• Potter, N., & Hotchkiss, J.H. (2006). Food Science. Delhi: CBS Publishers.

• Raina, U., Kashyap, S., Narula, V., Thomas, S., Suvira, Vir, S., & Chopra, S. (2005). Basic Food Preparation – A Complete Manual. Delhi: Orient Longman.

• Sharma, S., Aggarwal, M. & Sharma, S. (2018). Food Frontiers. Delhi: New Delhi Publishers.

• Sethi, M. (2005). Institutional Food Management. Delhi: New Age International Publishers.

**WEBSITES:**

• Food Safety and Standards Authority of India: <http://www.fssai.gov.in>.

• Baking courses: <https://www.udemy.com/topic/baking/>.

• Baking guide: <http://www.reviewlab.com/baking-guide/>.

**Details of units along with no. of classes required to complete the units**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit** | **Topic** | **Week** | **Month** | **No. of classes** |
| Unit I | Bread Technology  Preparation of bread – ingredients used, methods of dough preparation, steps in bread processing, evaluation of the baked bread, staling of bread, diseases of bread | Week 1-4 | July-August | 14 |
| Unit II | Biscuit and Cookies Technology   * Preparation of biscuits and cookies – types, ingredients, processing and evaluation * Crackers | Week 4-7 | August-September | 12 |
| Unit III | Food Packaging   * Packaging : its importance, essential features of an ideal package, various food packaging materials and their characteristics * Recent trends in the field of packaging (active packaging, intelligent packaging, RFID) * Label regulations and designing labels for packaged foods, nutritional labeling | Week 7-10 | September | 14 |
| uu  **V VI I** | Marketing and Cost Control   * Marketing : definition, scope, understanding the 4Ps (Product, Price, Place, Promotion), marketing techniques, marketing and distribution of processed products * Cost control : food cost, labour cost and other costs; costing of processed products | Week 10-15 | October-November | 20 |

**Methodology of Teaching:**

A mixed approach of teaching is used, along with lectures following techniques are used:

1. Market surveys: Conducting market surveys to analyse different food labels in relation with label characteristics, regulations and nutritional implications.
2. Demonstration: Various demonstrations are conducted for students to give them a live experience of the subject.
3. Assignment: Various assignments are given to students so they can understand the application of the subject and encouraging their group participation
4. Tests: Tests are conducted to prepare the students for the exam
5. Teaching Aids : Online resources are used as teaching aids
6. YouTube videos: Relevant videos from YouTube are shared.
7. Quiz: Interclass quiz are organized to inculcate the habit of regular and hard work among the students.

**Course Learning Objectives:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Unit No.** | | **Course Learning Outcomes** | | **Teaching and Learning Activities** | | **Assessment Tasks** | |
| **1** | | Students will have gained knowledge on role of ingredients, steps of processing and evaluation of bread. They will be aware of causes of staling and diseases of bread. | | Lecture classes on role of ingredients, methods of dough preparation, steps in processing and evaluation of bread, Video and demonstration on processing of bread. | | Class test focusing on role of ingredients and steps of processing of bread. Power point presentation by students on topics covered under this  unit. Evaluating the breads. | |
| **2** | | Students will have gained knowledge on types on cookies, and biscuits, role of ingredients, processing and evaluation of biscuits. They will also acquire information on crackers. | | Theory classes on preparation of biscuits and cookies, ingredients  required, steps of processing and evaluation. Discussion about crackers. Video and Demonstration on processing of biscuits and power point presentation. | | Assignments, Market surveys on types of biscuits. Evaluating the biscuits | |
| **3** | | Students will have gathered detailed information on importance of packaging, essential features of an ideal package and characteristics of various food packaging materials. Students will have a broad prospective of recent trends in packaging, label regulations and nutritional  labeling. | | Theory lectures on packaging materials, importance of packaging and essential features of an ideal package. Detailed discussion on recent trends in packaging, label regulations and nutritional labeling. | | Quiz on packaging requirements, market survey on packaging of processes foods, Assignment on nutritional labeling. | |
| **4** | | Students will have gained detailed information on marketing and distribution of processed products. They will be aware of different aspects of cost control and costing. | | Interactive lectures on techniques of marketing and distribution. Detailed discussion on scope of 4P’s of marketing. Discussion about cost control and techniques. | | Test on marketing and distribution.  Assignment on cost control measures in food industry.  Power Point presentation on marketing. | |

**ASSESSMENT**

* Assignment: Student groups are formed to prepare charts and posters, with a view to gain insight about the topics related to food technology and furthermore to beautify display board and related areas of Food Technology Lab.
* Test in the month of September of Unit 1
* Test in the month of October of Unit 2 and 3.

**Criteria of Assessment**

Students are assessed through classroom interaction, assignments, tests, chart and poster preparation, quiz and market surveys. The aim of these is to assess the following:

* Knowledge of the students
* Presentation skills, both written and oral
* Skill in the preparation of flow diagrams so as to summarize different processing steps
* Neatness in making diagram and their correct labelling
* Poster preparation skills.
* Quiz to check their understanding of the basic findamentals/application of the topics covered.

**Shyama Prasad Mukherji College for Women**

**Teaching Plan**

**Course and Year:** B.A. Programme and 3rd year

**Semester:** V

**Taught individually or shared:** Individually

**Paper: Advanced Baking Technology Practical**

**Faculty:** Dr. Shivanki Aggarwal

**No. of Classes** (per week)**:** 08 (=4+4 (2 Batches))

**COURSE OBJECTIVES:**

• To impart students with knowledge related to processing of breads, biscuits and cookies.

• To familiarize them with basics of food packaging, marketing and cost control.

**COURSE LEARNING OUTCOMES:**

• Describe the role of ingredients and steps of preparation of bread and biscuits.

• Illustrate techniques of marketing and cost control.

• Compare various food packaging materials and their characteristics.

• Justify label regulations and need for nutritional labeling.

• Demonstrate skills to prepare various kinds of breads and biscuits.

• Conduct sensory evaluation of prepared baked products.

**COMPULSORY READING:**

* Dubey S. C. (2016). Basic Baking: Science and Craft. Delhi: The Society of Indian Bakers.
* Dubey S. C. (2009). Bakery Vigyan. Delhi: The Society of Indian Bakers.
* Matz A. (2008). Bakery Technology and Engineering. 10th Edition. Delhi: CBS
* Publishers**.**

**ADDITIONAL RESOURCES:**

* Athalye, A.S. (1992). Plastics in Food Packaging. Delhi: Tata McGraw Hill Publishing Company.
* Booth, G.R. (2003). Snack Foods. Delhi: CBS Publishers.
* Faridi, H. (2004). The Science of Cookie and Crackers Production. Delhi: CBS Publishers.
* Griffin, S. (1997). Principles of Food Packaging. Connecticut: The AVI Publishing Company.
* Ketrapaul, N., Grewal, R.B., Jood, S. (2005). Bakery Science and Cereal Technology. Delhi: Daya Publishing House.
* Khanna, K., Gupta, S., Seth, R., Mahana, R., & Rekhi, T. (2004). The Art and Science of Cooking. Delhi: Phoenix Publishing House Private Limited.
* Potter, N., & Hotchkiss, J.H. (2006). Food Science. Delhi: CBS Publishers.
* Raina, U., Kashyap, S., Narula, V., Thomas, S., Suvira, Vir, S., & Chopra, S. (2005).
* Basic Food Preparation – A Complete Manual. Delhi: Orient Longman.
* Sharma, S., Aggarwal, M. & Sharma, S. (2018). Food Frontiers. Delhi: New Delhi
* Publishers.
* Sethi, M. (2005). Institutional Food Management. Delhi: New Age International
* Publishers.

**WEBSITES**:

* Food Safety and Standards Authority of India: http://www.fssai.gov.in.
* Baking courses: https://www.udemy.com/topic/baking/.
* Baking guide: http://www.reviewlab.com/baking-guide/

**Readings, e- references to be given to students but not prescribed in syllabus (if any) for each unit**

* Bread processing e ref- <https://youtu.be/aDdxdTSpalw>
* Food Safety and Standards Authority of India: <http://www.fssai.gov.in>.
* Baking guide: <http://www.reviewlab.com/baking-guide/>.

**Details of units along with no. of classes required to complete the units**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No.** | **Practical** | **Week** | **Month** | **No. of classes** |
| 1. 1. | Introduction to paper & to equip them with the necessary skills for bread, biscuits and cookies processing. | Week 1 | July | 4 |
| 1. 4. | Determination of gluten content in whole and refined wheat flour.  E ref: <https://www.quora.com>  <https://youtu.be/9nCYhlj5Z1c> | Week 2 | August | 4 |
| 1. 8. | Preparation and sensory evaluation of various biscuits and cookies |  |  |  |
| - Nan Khatai | Week 3 | August | 4 |
| - Coconut Biscuits | Week 4 | August | 4 |
| - Brownie | Week 5 | August | 4 |
| - Oatmeal Cookies | Week 6 | August-September | 4 |
| - Drop Cookies | Week 7 | Sept | 4 |
| E ref: <https://www.youtube.com/watch?v=tSIjSoGNrTc>,  <https://www.youtube.com/watch?v=oZWYPtpwxlE>, |  |  |  |
| 1. 7. | Preparation and sensory evaluation of: |  |  |  |
| - White bread | Week 8 | Sept | 4 |
| Brown bread | Week 9 | Sept | 4 |
| Pizza base | Week 10 | Sept | 4 |
| - Buns | Week 11 | October | 4 |
| Dinner rolls | Week 12 | October | 4 |
| E ref: [www.bbcgoodfood.com](http://www.bbcgoodfood.com)  <https://youtu.be/1l-0q35EFCo> |  |  |  |
| 1. 3. | Qualitative assessment of bran content in various wheat flours.  E ref:<https://youtu.be/lISDIufmypc> | Week 13 | October | 4 |
| 1. 5. | Determination of dough raising capacity (DRC) of yeast and factors affecting the yeast activity.  E ref. www.ddegjust.ac.in>studymaterial | Week 14 | November | 4 |
| 1. 9. | Revision | Week 15 | November | 4 |

**TEACHING LEARNING PROCESS**:

• Power Point Presentation Lecture

• Demonstration

• Experimental learning

• Videos

• Quiz

• Assignments

•Handouts

• Power Point Presentation by students

**COURSE LEARNING OBJECTIVES:**

|  |  |  |
| --- | --- | --- |
| **Practical** | **Course Learning Outcomes** | **Teaching and Learning** |
| **Quality Tests** | Students will have gained insight on various quality test of wheat flour and yeast to ensure quality of finished product. | conducting the test, video demonstration of various quality tests |
| **Practical on Bread, Buns and Pizza base:** | Students will have gained knowledge on role of  ingredients, steps of  processing and evaluation of bread. They will be aware of causes of various defects of bread. | Lecture classes on role of ingredients, methods of  dough preparation, steps in  processing and evaluation  of bread, Video and demonstration on  processing of bread. |
| **Biscuits** | Students will have gained  knowledge on types on  cookies, and biscuits, role of ingredients, processing and evaluation of biscuits. | Classes on preparation of biscuits and cookies, ingredients  required, steps of processing and evaluation. Discussion about types of biscuits. Video and Demonstration  on processing of biscuits  and power point  presentation. |

**ASSESSMENT**

1. At the end of each practical, students would be assessed on the basis of their skill, understanding of the scientific concept, and technique of conducting the practical’s.
2. Quality/ end result of the practical.
3. Preparation of practical file, where they record the principle of the practical, methodology, its observations, result and conclusion.
4. Viva, Test, Timely Submission of assignment.
5. Each practical would be marked on the basis of above four criteria’s

**Criteria of Assessment**

Routine assessment was undertaken for each practical done by the student groups. The aim of aforesaid is to assess the following:

* Preparedness of the students
* Plating skills of the recipe prepared
* Theoritical knowledge of the practical conducted

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**Shyama Prasad Mukherji College for Women**

**Teaching Plan**

**Course and Year:** BA Programme & 3rd Year

**Semester:** V

**Taught individually or shared:** Individually

**Paper: Home Based Catering (SEC)(Theory)**

**Faculty:** Dr. Shivanki Aggarwal

**No. of Classes** (per week)**:** 04

**Teaching Plan**

**COURSE OBJECTIVES:**

•To teach students the importance of food safety, hygiene and sanitation in catering business.

• To enable students to plan a food catering unit, developing the ideology behind good teamwork and hierarchical structures for business development.

•To enable students proposal for a catering unit establishment and menu for an event.

**COURSE LEARNING OUTCOMES:**

• Identify, develop and determine the factors contributing to the growth and planning of food catering unit.

• Describe the importance of menu planning and also factors affecting it in different food service establishments.

• Determine different food purchasing methods, techniques of food preparation, standardization of recipe, portion control and resources management.

• Understand the importance of food safety, hygiene and sanitation in catering business.

• Write proposal for a catering unit establishment and menu for an event.

• Understand the ideology behind good teamwork and hierarchical structures for business development.

**COMPULSORY READINGS:**

* Sethi, M. (2016). Institutional Food Management. Delhi: New Age International Publishers.
* West, B. B. & Wood, L. (1986). Food Service Institutions. 6th edition. Australia: MacMillian Publishing Co.
* Taneja, S. and Gupta, S. L. (2001). Entrepreneurship Development. Delhi: Galgotia Publishing.

**ADDITIONAL RESOURCES:**

* Knight, J. B. & Kotschevar, L.H. (2000). Quantity Food Production Planning and
* Management. 3rd edition. New York:John Wiley & Sons.
* Philip, E. T. (2008). Modern Cookery for Teaching and Trade Part I & II. Delhi: Orient Longman.
* Khan, M A. (1987). Food Service Operations, Connecticut: AVI Publishing INC,
* Malhotra, R. K. (2002). Food Service and Catering Management. Connecticut. Delhi:
* Anmol Publication Pvt. Ltd.
* Taylor, E. & Taylor, J. (1990). Mastering Catering Theory. London: Macmilan Press Ltd.
* Wood, R. C. (1994). Organizational Behaviour for Hospitality Management. First ed. London: Sage Publications Limited.

**WEBSITES:**

* http://egyankosh.ac.in/bitstream/123456789/33548/1/Unit-2.pdf
* http://ncert.nic.in/textbook/pdf/lehe104.pdf
* http://foodplanning.umich.edu/download/FoodServicePlanningGuidelines.pd

**Details of units along with no. of classes required to complete the units**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit** | **Topic** | **Week** | **No. of classes** | **Month** |
| **Unit I** | **Introduction to Food Service**  - Factors contributing to the growth of food service industry  - Kinds of food service establishments  e ref- <https://youtu.be/BJQiaquTYW0> | 1 & 2 | 8 | July- August |
| **Unit II** | **Resources**  - Money  - Manpower  - Time  - Facilities and equipment  - Utilities  E ref: <https://youtu.be/mK739IJjHcg> | 3 & 4 | 8 | August |
| **Unit III** | **Food Production**  Importance of menu planning  Functions of menu planning  Types of menu  Skills required for menu planning  Factors affecting menu planning  Menu planning for different kinds of food service units. | 5-7 | 10 | Aug-Sept |
| **Unit**  **IV** | **Food Purchase and Storage**  Food purchase: definition, principles, function, process and methods. receiving and inspection of deliveries.  Food storage: definition, storage procedure (dry & wet, perishable & non perishable), organization of storage  <http://viavo.net/food-storage> | 7-10 | 14 | Sept |
| **Unit**  **V** | **Quantity Food production**  Standardization of recipes, quantity food preparation techniques, recipe adjustments and portion control, Hygiene and Sanitation  <https://youtu.be/IAcoUszRGxc> | 11-13 | 10 | October |
| **Unit VI** | **Planning of A Food Service Unit** - Preliminary Planning Survey of types of units, identifying clientele, menu, operations and delivery.  - Planning the set up:  a) Identifying resources  b) Developing Project plan  c) Determining investments  d) Project Proposal  E ref: [https://www.thebalancesmb.com/how-to-start-a -home-based-catering-service-3950494](https://www.thebalancesmb.com/how-to-start-a%20-home-based-catering-service-3950494) | 13-15 | 10 | November |
|  | Revision |  |  |  |

**Methodology of Teaching:**

A mixed approach of teaching is used, along with lectures following techniques are used for teaching:

|  |  |
| --- | --- |
| 1. Visual Aids | Visual aids help the students to understand topics in better manner. It creates a long lasting impact and acts as a good teaching aid. |
| 1. Field Visit | Students are encouraged to visit local bakeries, catering units and tiffin packers following due deligence when lockdown is lifted. |
| 1. Online Market surveys | Conducting online market surveys are given as an assignment to the students. They get to know about variety and prices of various cleaning products/aids by doing this assignment. |
| 1. You tube videos | Various you tube videos related to subject are shared with students to make them better understand the topic for ex. Standardization of recipe, hygiene and sanitation, quantity food production etc. |
| 1. Quiz | Various quizes are conducted within the class to inculcate competition and motivate them to work harder. |
| 1. Assignments/Projects | Various assignments and projects are given to students so that they can understand the application of the subject and it also encourages group participation |
| 1. Tests | Tests are conducted to prepare the students for the exam |
| 1. Workshops | Students are encouraged to attend inter and intra college workshops/seminars which are conducted at various departments at various levels to enhance their knowledge and to strengthen them holistically. |

**Course Learning Objectives:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit No.** | **Course Learning Outcomes** | **Teaching and Learning Activities** | **Assessment Tasks** |
| 1 | Students will be acquainted with knowledge of factors contributing to the growth of food service industry and with various kinds of food service establishments | Interactive lecture along with videos on how the food industry has evolved over the years and on various kinds of food service establishment | Essay writing on factors contributing to the growth of food service industry and various kinds of food service establishments |
| 3 | Students will have gained in depth knowledge about the various resources used by the food service industry | Theory classes on different tangible resources used by the food service industry. | Multiple choice questions and students presentations. |
| 2 | Students will have gained knowledge on various aspects of menu planning. They will be able to do menu planning for different kinds of food service units | Theory classes using power point presentation on menu, menu planning, types of menu, factors affecting menu planning | Quiz, assignment on menu planning and development of menu cards. |
| 2 | Students will be aware of  general food purchase and storage principles, methods, inspection of deliveries and organization of storage. | Detailed discussion along with videos on the definition, methods, principles of food purchase and storage organization. | Checklist development for market study of how various grocery stores organize their supplies and their procurement procedure |
| 2 | Students will have a broad perspective of the quantity food production including standardization of recipes (percentage method) and portion control. They will learn about the hygiene and sanitation aspects of quantity food production | Discussion on the quantity food production, standardization of recipes using percentage method, and portion control. Power point presentation on role of hygiene and sanitation in maintaining good manufacturing practices. | Flowchart preparation on quantity food production, assignment on hygiene and sanitation. |
| 4 | Students will have gather information on the various aspects of planning of a food service unit | Practical example based teaching on preliminary planning. Discussion on steps and types of plan, planning guide/ prospectus, identifying clientele, menu, operations and delivery. | Class test focusing on short notes and definitions. Group activity engaging students on various aspects of preliminary planning. |

**ASSESSMENT**

**Tentative date of assessments/ assignments (time frame):**

1. Test 1- in August on Unit 1 & Unit 3.
2. Assignment in September on Unit 2
3. Test 2- in November in Unit 4 & Unit 5

**Criteria of Assessment:**

Students are assessed through written assignments, ppts, test, poster preparation, quiz, market survey/ field survey reports/ project etc. The aim of these is to assess the followings:

1. Knowledge of the students
2. Presentation skills-written and oral
3. Skill in preparation of flow diagrams so as to summarize different processing steps
4. Poster preparation skills.
5. Quiz to check their understanding of the basic fundamentals/ application of the topic covered.
6. Performance in the class tests.