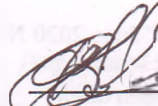


**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
SUMY NATIONAL AGRICULTURAL UNIVERSITY**

Department of Food Technology

"Approved by"

**Head of Department
Food technology**

 **"25" June 2020
(F.V. Pertsev)**

EDUCATIONAL PROGRAMME

INNOVATIVE TECHNOLOGIES IN THE ENTERPRISES OF THE BRANCH

Specialty: 181 "Food Technology"

Educational program for training masters "Food Technology"

Faculty: Food Technologies

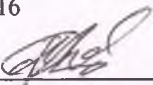
2020 - 2022

Work program on **Innovative technologies in the enterprises of the branch** for students of the specialty 181 "Food technologies"

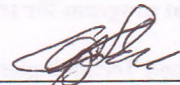

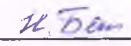
Developers: Melnik O. Y., Ph.D, Associate Professor of Food Technology,
Pertsevoy F.V., Doctor of Technical Sciences, Professor of the Department of Food Technology.

The work program was approved at a meeting of the Department of Food Technology.

Protocol of "25" June 2020 № 16

Head of the Department  (Pertsevoy F.V.)
(signature) (surname and initials)

Agreed:

Guarantor of the educational program 
Dean of the Faculty of Food Technologies  (O. Melnyk)
Methodist of the Department of Education Quality,
licensing and accreditation 

Registered in the electronic database: date: 28.08 2020

1. Description of the discipline

Name of indicators	Field of knowledge, direction of training, educational and qualification level	Characteristics of the discipline		
		full-time education	external form of education	
Number of credits - 10	Field of knowledge: <i>18 "Production and technology"</i>	<i>Professional and practical training</i>		
Modules - 2	Specialty: <i>181 "Food Technology"</i>	Year of preparation:		
Content modules: 4		2020-2022	2020-2021	
Individual research task: MCR		Course		
		1 m, 2 m	1 m	
The total number of hours is 300		Semester		
	2nd	3rd	2nd	
	Lectures			
Weekly hours for full-time study: classroom - 4 independent student work - 6	<i>14 years</i> <i>8 years</i> <i>8 years</i>			
	Practical, seminar			
	Laboratory			
	<i>16 years</i>	<i>72 years</i>	<i>12 years</i>	
	Independent work			
	<i>30 years</i>	<i>130 years</i>	<i>40 years</i>	
	Individual tasks: MKR - 30 years			
	Type of control: - <i>exam</i> - <i>exam</i>			
	Educational degree: <i>master</i>			

Note.

The ratio of the number of hours of classroom classes to independent work is (%):
66,7 / 43,3 (180/120).

2. The purpose and task of the discipline

Purpose: expansion and deepening of students' knowledge of the current state and prospects of nutrition, scientific substantiation of the use of innovative methods of raw material processing, students' mastery of theoretical and practical skills and their implementation during the design of the latest food and culinary products; the ability to diagnose food technologies as integrated technological systems aimed at improving existing and developing more effective innovative technologies; ability to determine the features and dynamics of transformation of innovative food enterprises and restaurants in accordance with today's requirements.

Task: training of future specialists who are acquainted with the following important problems and issues of food technologies: innovative technologies and their use in food enterprises and restaurants; main directions and methodical approaches to designing innovative food products and diets; improvement and development of innovative food technologies on the basis of the latest achievements of science and technology; study of patterns of formation of the range of food and culinary products, determination of development prospects; acquisition of knowledge on the scientific principles of food rations, taking into account the introduction of innovative food technologies.

Learning outcomes of the discipline (RND):

As a result of studying the discipline the student will be able to demonstrate:

- knowledge of the current state and prospects of nutrition; innovative methods of raw material processing; the latest functional foods;
- knowledge of modern dietary supplements and the latest technologies for the production of dietary supplements; classification and characterization of food additives for functional purposes;
- knowledge of methods for determining rational technological modes of food and restaurant production;
- knowledge of waste-free technologies and new ways of preserving and storing food;
- ability to demonstrate initiative and ingenuity during the development and implementation of innovations of technical and technological direction, the ability to independently make non-standard creative decisions;
- ability to plan and manage innovative research projects of fundamental and applied direction taking into account the current state of science and technology in food technology, to conduct research, analyze the results and draw conclusions;- ability to design the composition of food products, develop and implement innovative technological solutions, production technologies, storage and preservation of semi-finished and finished products;
- ability to diagnose technologies of food and culinary products as integral technological systems aimed at improving existing and developing more effective innovative technologies, to choose the most promising and rational areas of scientific and

technical activities;

- ability to design the composition of food products, develop and implement innovative technological solutions, production technologies, storage and preservation of semi-finished and finished products;

- ability to analyze and formalize the results of scientific and production tests in the form of scientific and technical documentation, scientific reports, security documents, articles, abstracts of scientific conferences.

3. Curriculum of the discipline

(Approved by the SNAU Verkhovna Rada on April 28, 2014, protocol № 9)

Module 1.

Innovative technologies of food and culinary products.

Content module 1. Innovations in the food industry.

Topic 1. Introduction. Subject and tasks. Innovations in the food industry.

Tasks of the discipline, its content, connection with other disciplines, importance in the training of a specialist. Innovations in the food industry. Innovative enterprises and their characteristics.

Topic 2. Breakthrough innovations in the food industry of the future.

Bioinformatics and food design, focused on the individual needs of each consumer. Alternative sources of protein. Technology of canning and extending the shelf life of food.

Topic 3. Technological innovations in the food industry. Development and implementation of technologies for storage of raw materials, which is the basis for food production. Application of resource-saving technologies, which are characterized by the most useful yield of finished products and a minimum of waste, based on modern processing methods. Improving technological processes in order to reduce the production cycle time without losing the quality of finished products. Development and implementation of own packaging lines that will fully meet the specifics of the products manufactured. Improving packaging, packaging and transportation methods.

Topic 4. Innovative food ingredients. General classification and characteristics of food ingredients. Nutrients and their characteristics. Dietary fiber, their characteristics and properties. Algae and products of their processing. Sweeteners, their characteristics and classification. Characteristics and properties of structuring and thickening food additives. Carotene-containing raw materials. BADI.

Topic 5. Innovations in restaurants.

Innovations and innovative activity. Innovations and their classification. The most common innovations in the restaurant industry. Restaurant idea and concept. Restaurant with a legend. The concept of legend. How to write a legend. History of menu creation, new types of menus, their style and design. Innovative approaches to creating menus. Fashion in the names of dishes. Presentation of dishes and the concept of the institution: domestic and foreign experience. Menu design and style. Features of creating menus for restaurants of modern formats. Fusion Kitchen. Molecular cuisine. Categories and types. History of origin. Theoretical

foundations of molecular cuisine. Equipment for creating molecular cuisine.

Module 2.

Modern aspects of nutrition in human nutrition.

Content module 2. Modern nutrition in human nutrition.

Topic 6. Fundamentals of nutrigenomics. Modern scientific views on the human need for essential and non-essential nutrients: proteins, carbohydrates, vitamins, macro- and micronutrients and other biologically active substances. Information factors of nutrition. Energy value of food.

Topic 7. Modern aspects of nutrition and scientific-practical and methodological approaches to the design of functional foods. External environment, food quality and public health. Basic theories and concepts of nutrition: balanced, adequate, optimal, functional, special, anti-aging and other types of human nutrition.

Quality of functional food. Scientific-practical and methodological approaches to the design of functional foods.

The essence of the methodology of designing food technologies and diets.

Fundamentals of multi-component food technology design. Methods for determining rational technological regimes for the production of restaurant food.

Basic principles of designing recipes for culinary products. Formation of the purpose and tasks of development of compoundings for new production. Development of the project of a compounding. Requirements for the choice of the name of new production and registration of compoundings.

Topic 8. The concept of functional nutrition. Classification and characterization of functional foods. The concept of functional nutrition. Characteristics of functional foods. Food technology that enhances the body's protective functions.

Food products with radioprotective properties. Foods high in micronutrients. Food products using modern structure-forming substances. Foods with antioxidant properties. Foods with sweeteners. Characteristics of food products of reproductive and gerontological purposes. Food products of molecular technology.

Module 3.

Functional food products.

Content module 3. Modern innovative technologies and the role of functional foods in human nutrition.

Topic 9. Innovative technologies and quality of functional foods (1).

Innovative technologies of food and restaurant products: branded and banquet dishes, author's fusion cuisine using a variety of enogastronomic methods, creative trends, extrusion and molecular technologies.

Technology of cold appetizers, dishes and culinary products from vegetables, mushrooms, legumes using dietary supplements, creative trends and molecular

technologies. Substantiation of conditions and sale of finished products; requirements for the quality of finished products.

Technology of cold snacks, dishes and culinary products from cheese and eggs with the use of dietary supplements, creative trends and molecular technologies. Substantiation of conditions and sale of finished products; requirements for the quality of finished products.

Technology of sauces and soups (including aintopf) with the use of dietary supplements, creative trends and molecular technologies. Substantiation of conditions and sale of finished products; requirements for the quality of finished products.

Topic 10. Innovative technologies and quality of functional foods (2).

Technology of meat, meat products and poultry dishes with the use of dietary supplements, creative and molecular technologies. Substantiation of conditions and sale of finished products; requirements for the quality of finished products.

Technology of milk dishes and dairy products using innovative ingredients, technologies of processing and storage of dairy products. Prospects for the use of milk A2. Substantiation of conditions and sale of finished products; requirements for the quality of finished products.

Topic 11. Innovative technologies and quality of functional foods (3).

Technology of desserts and drinks with the use of dietary supplements, non-traditional raw materials, creative trends and molecular technologies. Substantiation of conditions and sale of finished products; requirements for the quality of finished products.

Topic 12. Innovative technologies and quality of functional foods (4).

Technology of flour and flour confectionery products with the use of dietary supplements, extrusion technologies and low-temperature technologies.

Substantiation of conditions and sale of finished products; requirements for the quality of finished products.

4. The structure of the discipline

Names of content modules and topics	Number of hours												
	Full-time							Correspondence form					
	All-him	including					Evening	including					
		1	n	lab	ind	s.r.		1	n	lab	ind	s.r.	
1	2	3	4	5	6	7	8	9	10	11	12	13	
<i>SPRING SEMESTER</i>													
Module 1. Innovative technologies of food and culinary products.													
Content module 1. Innovations in the food industry.													
Topic 1. Introduction. Subject and tasks. Innovations in the food industry.	3	1				4	6	1					5
Topic 2. Breakthrough innovations in the food industry of the future.	4	2				4	6	1					5

Topic 3. Technological innovations in the food industry.	9	1		4		4	6	1				5
Topic 4. Innovative food ingredients.	4	2				4	12	1	6			5
Topic 5. Innovations in restaurants.	10	2		4		4	6	1				5
Module 2.												
Modern aspects of nutrition in human nutrition.												
Content module 2. Modern nutrition in human nutrition.												
Topic 6. Fundamentals of nutrigenomics.	4	2				2	6	1				5
Topic 7. Modern aspects of nutrition and scientific-practical and methodological approaches to the design of functional foods.	12	2		4		4	6	1				5
Topic 8. The concept of functional nutrition.	12	2		4		4	12	1	6			5
Together	60	14		16		30	60	8	12			40
AUTUMN SEMESTER												
Module 3. Functional food products.												
Content module 3. Modern innovative technologies and the role of functional foods in human nutrition.												
Topic 9. Innovative technologies and quality of functional food products (1).	54	4		20		30						
Topic 10. Innovative technologies and quality of functional food products (2).	52	2		20		30						
Topic 11. Innovative technologies and quality of functional food products (3).	52	2		20		30						
Topic 12. Innovative technologies and	52	2		20		30						

quality of functional food products (4).												
Together	210	10		80	30	120						
Hours in general	300	24		96		180						

5. Topics and plan of lectures

No s/ n	Name topics	Number hours
<i>SPRING SEMESTER</i>		
1	Lecture topic 1. Introduction. Subject and tasks. Innovations in the food industry. 1. Tasks of the discipline, its content. 2. Innovations in the food industry.	1/1
2	Lecture topic 2. Breakthrough innovations in the food industry of the future. 1. Bioinformatics and food design. 2. Alternative sources of protein. 3. Technology of canning and prolongation of food storage.	2/1
3	Lecture topic 3. Technological innovations in the food industry. 1. Development and implementation of raw material storage technologies. 2. The use of resource-saving technologies, which are characterized by the most useful yield of finished products and a minimum of waste. 3. Improving packaging, packaging and transportation methods.	1/1
4	Lecture topic 4. Innovative food ingredients. 1. General classification and characteristics of food ingredients. 2. Dietary fiber, their characteristics and properties. 3. Algae and products of their processing. 4. BADI.	2/1
5	Lecture topic 5. Innovations in restaurants. 1. The most common innovations in the restaurant industry. 2. Fashion in the names of dishes. Presentation of dishes and the concept of the institution: domestic and foreign experience. 3. Innovative approaches to creating menus. 4. Molecular cuisine.	2/1
6	Lecture topic 6. Modern basics of nutrigenomics. 1. Modern scientific views on the human need for essential and non-essential nutrients. 2. Energy value of food.	2/1
7	Lecture topic 7. Modern aspects of nutrition and scientific-practical and methodological approaches to the design of functional foods.	2/1

	<ol style="list-style-type: none"> 1. External environment, food quality and public health. 2. Scientific-practical and methodological approaches to the design of functional foods. 	
8	<p>Lecture topic 8. The concept of functional nutrition.</p> <ol style="list-style-type: none"> 1. Classification and characterization of functional foods. 2. The concept of functional nutrition. Characteristics of functional foods. 	2/1
Total		14/8
<i>AUTUMN SEMESTER</i>		
9	<p>Lecture topic 9. Innovative technologies and quality of functional foods (1).</p> <ol style="list-style-type: none"> 1. Innovative technologies of restaurant products. 2. Technology of cold appetizers, dishes and culinary products using dietary supplements, creative trends and molecular technologies. 3. Technology of sauces and soups (including aintopf) with the use of dietary supplements, creative trends and molecular technologies. 	4
10	<p>Lecture topic 10. Innovative technologies and quality of functional foods (2).</p> <ol style="list-style-type: none"> 1. Technology of meat, meat products and poultry dishes using innovative technologies. 2. Technology of milk dishes and dairy products using innovative ingredients, technologies of processing and storage of dairy products. 3. Substantiation of conditions and sale of finished products; requirements for the quality of finished products. 	2
11	<p>Lecture topic 11. Innovative technologies and quality of functional foods (3).</p> <ol style="list-style-type: none"> 1. Technology of desserts and drinks with the use of dietary supplements, non-traditional raw materials, creative trends and molecular technologies. 2. Substantiation of conditions and sale of finished products; requirements for the quality of finished products. 	2
12	<p>Lecture topic 12. Innovative technologies and quality of functional foods (4).</p> <ol style="list-style-type: none"> 1. Technology of flour and flour confectionery products with the use of dietary supplements, extrusion and low-temperature technologies. 2. Substantiation of conditions and sale of finished products; requirements for the quality of finished products. 	2
Total		10
	Together	24/8

6. Topics of laboratory works

No s / n	Name topics	Number hours
<i>SPRING SEMESTER</i>		
1	Innovative technologies of food enterprises and restaurants	8/6
2	Methodological approaches to food design. Use of food ingredients.	8/6
Total		16/12
<i>AUTUMN SEMESTER</i>		
3	Introduction to scientific and practical approaches to the design of functional foods. Criteria for assessing the quality and functional properties of functional foods.	40
4	Introduction to innovative technologies and quality of functional foods.	40
Total		80
Together		96/12

7. Independent work

No s / n	Name topics	Number hours
<i>SPRING SEMESTER</i>		
1	Topic 1. Introduction. Subject and tasks. Innovations in the food industry.	4/5
2	Topic 2. Breakthrough innovations in the food industry of the future.	4/5
3	Topic 3. Technological innovations in the food industry.	4/5
4	Topic 4. Innovative food ingredients.	4/5
5	Topic 5. Innovations in restaurants.	4/5
6	Topic 6. Fundamentals of nutrigenomics.	2/5
7	Topic 7. Modern aspects of nutrition and scientific-practical and methodological approaches to the design of functional foods.	4/5
8	Topic 8. The concept of functional nutrition.	4/5
Total		30/40
<i>AUTUMN SEMESTER</i>		

9	Topic 9. Innovative technologies and quality of functional food products (1).	30
10	Topic 10. Innovative technologies and quality of functional food products (2).	30
11	Topic 11. Innovative technologies and quality of functional food products (3).	30
12	Topic 12. Innovative technologies and quality of functional food products (4).	30
13	Individual task (MCR)	30
Total		150
	Together	180/40

8. Teaching methods

Lectures-discussions, "inverted class", brainstorming, joint learning, mutual assessment, teamwork, use of problem situations, use of training and control tests, use of reference notes of lectures.

Use of multimedia technologies.

9. Evaluation methods

Formative assessment: in each lesson students receive descriptive feedback. According to the results of the first module - written work that gives students an idea of the level of their progress.

Summative assessment is aimed at assessing the extent to which students have achieved the planned learning outcomes through the evaluation of presentations, the implementation of written tasks.

Evaluation on a 100-point scale (distribution of points in section 10).

10. Distribution of points received by students

for the credit

Current testing and independent work					Together for modules and IWS	Attestation	Total
Content module 1 - 35 points		Content module 2 - 35 points					
T1	T2	T3	T4	T4 (2-4)	85 (70 + 15)	15	100
15	20	15	10	10			

for the credit

Current testing and independent work	T	o	g	e	A	t	T	e
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Content module 3 - 35 points		Content module 4 - 35 points				
T5	T5 (2)	T6	T6 (2-5)	85 (70 + 15)	15	100
15	20	15	20			

Assessment scale: national and ECTS

The sum of points for all types of educational activities	ECTS assessment	Score on a national scale	
		for exam, course project (work), practice	for the credit
90 - 100	AND	perfectly	credited
82-89	IN	fine	
75-81	WITH		
69-74	D	satisfactorily	
60-68	IS		
35-59	FX	unsatisfactory with the possibility of reassembly	not credited with the possibility of re-assembly
1-34	F	unsatisfactory with mandatory re-study of the discipline	not enrolled with mandatory re-study of the discipline

11. Methodical support

1. In the process of development.

12. Recommended literature**Legislation and regulations**

1. Про захист прав споживачів: Закон України від 15.12.1993 р. № 3682-ССІІІ.
2. Про внесення змін і доповнень до статті 23 Закон України «Про захист прав споживачів»: Закон України від 20.06.1995 р.
3. Про інноваційну діяльність: Закон України від 04.07.2002 р. № 40-IV.
4. Про внесення доповнень до Переліку продукції, що підлягає обов'язковій сертифікації в Україні, до Термінів введення обов'язкової сертифікації окремих видів продукції в Україні та затвердження правил обов'язкової сертифікації готельних послуг та послуг харчування: Наказ Державного комітету України по стандартизації, метрології та сертифікації від 27.01.1999 р., № 3 7.
5. Про забезпечення санітарного та епідеміологічного благополуччя

населення: Закон України від 24.02.1994 р. № 4004-ССПШ.

6. Про затвердження Інструкції про порядок розгляду питань щодо продовження строку перебування в Україні іноземців та осіб без громадянства (Наказ № 887 від 19.11.99 р. М-ва внутрішніх справ України) <http://rada.gov.ua./pravo>.

7. Про затвердження Рекомендованих норм технічного оснащення закладів громадського харчування: Наказ міністра економіки та з питань європейської інтеграції України від 03.01.2003 р. № 2.

8. Про основні напрями розвитку туризму в Україні до 2010 року: Указ Президента України № 973/99 від 10 серпня 1999 р.

9. Про рекламу № 270/96-вр від 03.07.96 р. <http://rada.gov.ua./pravo>.

10. Про туризм № 324/95-вр від 15.09.95 р. та Про внесення змін і доповнень до Закону України «Про туризм» від 18.11.03 р. <http://rada.gov.ua./pravo>.

11. Про якість та безпеку харчових продуктів і продовольчої сировини: Закон України від 23.12.1997 р. № 771/97-ВР,

12. ДСТУ 4281:2004. Заклади ресторанного господарства. Класифікація. – К.: Держспоживстандарт України, 2004.

13. ДСТУ 4268:2003 Послуги туристичні. Засоби розміщування. Загальні вимоги.

14. ДСТУ 4269:2003 Послуги туристичні. Класифікація готелів.

15. ДСТУ 4527:2006 Послуги туристичні. Засоби розміщування. Терміни та визначення.

16. ДСТУ 3279- 95 Стандартизація послуг. Основні положення.

17. Конституція України. – К.: Інформ. Вид-во Агентство «ІВА», 1996.

18. Міждержавний стандарт ГОСТ 30335-95 Услуги населению. Термины и определения.

19. Міждержавний стандарт ГОСТ 30390-95 Общественное питание. Кулинарная продукция, реализуемая населению. Общие технические условия.

20. Міждержавний стандарт ГОСТ 30523-97 Услуги общественного питания. Общие требования.

21. Міждержавний стандарт ГОСТ 30524-97 Общественное питание. Требования к обслуживающему персоналу.

22. СанПиН 2.3.2.1324-03 Гигиенические требования к срокам годности и условиям хранения пищевых продуктов.

23. СанПиН 42-123-5777-91 Санитарные правила для предприятий общественного питания, включая кондитерские цехи и предприятия, вырабатывающие мягкое мороженое.

24. Правила роботи закладів (підприємств) ресторанного господарства: Наказ міністра економіки та з питань європейської інтеграції України від 24.07.2002, № 219.

25. Правила користування готелями й аналогічними засобами розміщення та надання готельних послуг (Наказ Державної туристичної адміністрації України 16.03.04, № 19) <http://rada.gov.ua./pravo>.

26. Програма розвитку туризму в Україні на 2002-2010 роки <http://rada.gov.ua./pravo>.

27. ISO 140012004 Системи екологічного менеджменту.

Basic

28. Архипов В. В. Гостинично-ресторанный сервис: особенности культуры и традиций питания народов мира: курс лекций / В. В. Архипов, Е. И. Иванникова. – К.: Атика, 2005. – 215 с.
29. Байлик С. И. Гостиничное хозяйство: учебник / С. И. Байлик; М-во образования и науки Украины. – 2-е изд. перераб. и доп. – К.: Дакор, 2009. – 367 с.
30. Батра Раджив. Рекламный менеджмент и Р. Батра, Д. Майерс, Д. Аакер. – М.; С.-Пб.; К.: Вильямс, 2000. – 780 с.: ил.
31. Бойко М. Г. Організація готельного господарства: підручник / М. Г. Бойко, Л. М. Гопкало. – К., 2010. – 447 с.
32. Ван Моурик С. В. Мировой рынок пищевых добавок – состояние и перспективы / С. В. Ван Моурик // Продукты&ингредиенты, 2004. – № 2. – С. 6-8.
33. Волков Ю. Ф. Интерьер и оборудование гостиниц и ресторанов: учеб. Пособие / Ю. Ф. Волков. – Ростов-на-Дону: Феникс, 2003. – 351 с.
34. Голубева Л. В. Десертные продукты питания функционального назначения / Л. В. Голубева, Е. И. Мельникова, Е. Б. Терешкова // Хранение и переработка сельхозсырья. – 2006. – № 10. – С. 71-73.
35. Долгополова С. В. Новые кулинарные технологии / С. В. Долгополова. – М.: ЗАО «Издательский дом «Ресторанные ведомости», 2005. – 275 с.
36. Економіка й організація інноваційної діяльності: підручник / За чен. О. І. Волкова, М. П. Денисенка. – К.: Професіонал, 2004. – 960 с.
37. Ефимова Ю. А. Эффективное меню: концепция и дизайн. – М.: ЗАО «Издательский дом» «Ресторанные ведомости», 2006. – 176 с.
38. Инновационное развитие: экономика, интеллектуальные ресурсы, управление знаниями / Под ред. Б. З. Мильнера. – М.: Инфра-М, 2010. – 675 с.
39. Карсекін В. І. Інвестиційна політика: проблеми теорії і практики готельного бізнесу: монографія / В. І. Карсекін, Л. А. Бовш. – Х.: ХДУХТ, 2010. – 518 с.
40. Конран Т. Первокласний ресторан: ідея, створення, розвиток / Теренс Конран. – М.: Альпіна Бізнес Букс, 2008. – 210с.
41. Кухня. Менеджмент и организация / Под ред. З. Митше, Й. Райзингер, Д. Кранцль, П. Фишер, М. Бухингер. – М.: Издательство «Центрполиграф», 2010. – 252 с.
42. Мазаракі А. А. Організація обслуговування у підприємствах ресторанного господарства: підручник для вузів / А. А. Мазаракі, Н. П. Благополучна, І. І. Гайовий, О. М. Григоренко, Т. Є. Литвиненко, Г. Т. П'ятницька, Н. О. П'ятницька, А. М. Расулова, М. Л. Світлична. – К.: КНТЕУ, 2005. – 632 с.

Additional

43. Гаєць В. М. Інноваційні перспективи України / В. М. Гаєць, В. П. Семіноженко. – Х.: Константа, 2006. – 272 с.
44. Лазерсон И. Как привлечь гостей в ресторан / Илья Лазерсон, Федор

Сокирянский. – М.: Зксмо, 2011. – 288 с.

45. Морозов М. А. Информационные технологии в социально-культурном сервисе и туризме. Оргтехника: учебник / М. А. Морозов, Н. С. Морозова. – М.: Академия, 2002. – 240 с.

46. Халворсен Ф. Основы кейтеринга. Как организовать выездное обслуживание / Ф. Халворсен. – М.: Издат. дом «Ресторанные ведомости», 2005.– 303 с.