

Документ подписан простой электронной подписью

Информация о владельце:

ФИО: Оботурова Наталья Павловна

Должность: Декан факультета пищевой инженерии и биотехнологий имени

академика А.Г. Храмцова

Дата подписания: 01.07.2024 16:28:26

Уникальный программный ключ:

f3ead44b4b003a7ef6904af77de79fa535189

Abstract to the work program of the discipline

Name of the discipline	Общая биология и микробиология / General biology and microbiology
Summary	Levels of organization, properties and diversity of living systems. The molecular genetic level of the organization of living systems. The cellular level of the organization of living systems. Tissue, organ, organismal and population-specific levels of organization of living systems. Biogeocenotic and biospheric levels of organization of living systems. Evolution. Systematics of microorganisms. The diversity of microorganisms and their application in biotechnology Metabolism, reproduction and cultivation of microorganisms. Fundamentals of genetics, breeding and ecology of microorganisms. Methods of research of microorganisms
The results of mastering the discipline	Understands the essence of microbiological processes occurring in the production of biotechnological products for the food industry. He is able to study, analyze and use specific types of biological objects in real processes and transformations; to use knowledge of biological laws, patterns and their interrelations for analysis Can study and analyze the main types of biological objects; possesses techniques and methods based on biological laws and patterns both for studying biological objects themselves and for processes involving them
Labor intensity, ie.	9
Reporting form	Exam
The list of basic and additional literature necessary for the development of the discipline	
Basic literature	1. Ryabtseva S.A. General biology and microbiology. Part 1. General biology [Electronic resource] : textbook / S.A. Ryabtseva. — The electron.text data. — Stavropol: North Caucasus Federal University, 2016. — 149 p. — 2227-8397. — Access mode: http://www.iprbookshop.ru/66069.html 2. Bogomolova, A. Yu. Biology in the modern world [Electronic resource]: textbook / A. Yu. Bogomolova, O. V. Kabanova. — The electron. text data. — Orenburg : Orenburg State University, EBS DIA, 2017. — 130 p. — 978-5-7410-1822-4. — Access mode: http://www.iprbookshop.ru/78766.html 3. Tyumentseva, E. Y. Fundamentals of microbiology : a textbook / E. Y. Tyumentseva. — Omsk : Omsk State Institute of Service, Omsk State Technical University, 2015. — 123 p. — ISBN 978-5-93252-357-5. — Text : electronic // Electronic Library system IPR BOOKS : [website]. — URL: http://www.iprbookshop.ru/32788.html 4. Krasnikova L.B. General and food microbiology. Part I [Electronic resource] : textbook / L.B. Krasnikova, P.I. Gunkova. — The electron.text data. — St. Petersburg : ITMO University, 2016. — 135 p. — 2227-8397. — Access mode: http://www.iprbookshop.ru/67411.html
Additional literature	1. Myshalova O.M. Biology [Electronic resource]: textbook/ Myshalova O.M.— Electron. text data.— Kemerovo: Kemerovo Technological Institute of Food Industry, 2014.— 107 p.— Access mode: http://www.iprbookshop.ru/61261.html .— EBS "IPRbooks" 2. Tulyakova O.V. Biology [Electronic resource]: textbook/ Tulyakova O.V.— Electron. text data.— Saratov: University education, 2014.— 448 p.— Access mode: http://www.iprbookshop.ru/21902.html .— EBS "IPRbooks"

- | | |
|--|--|
| | <p>3. Yemtsev, Vsevolod Tikhonovich. Microbiology : textbook for bachelors : [for students of higher educational institutions studying in the fields and specialties of agronomic education] / V. T. Yemtsev, E. N. Mishustin. - 8th ed., ispr. and add. - Moscow : Yurait, 2016. -446 p.</p> <p>4. Gusev, Mikhail Viktorovich. Microbiology : a textbook for students.universities / M. V. Gusev, L. A. Mineeva.- 9th ed., erased. - Moscow Academy, 2010. - 461, [1] p.</p> <p>5. Netrusov, Alexander Ivanovich. Microbiology : University course : textbook for universities / A. I. Netrusov, I. B. Kotova. - 4th ed., reprint. and add. - Moscow. : Academy, 2012. - 384 p.</p> |
|--|--|