

*Federal State Autonomous Educational Institution of Higher Education "Peoples'  
Friendship University of Russia"*

*Agrarian and technological institute*

**SUMMARY ACADEMIC DISCIPLINES**

**27.03.01 Standardization and metrology**

<b>Name of the discipline</b>	Innovation technologies in standardization
<b>Volume discipline</b>	4 3E (144 час.)
<b>Course Description</b>	
<b>The name of the partition (the) discipline</b>	<b>The name of the partition (the) discipline</b>
Section 1 Principles of standardization	Topic 1.1. Basic principles of standardization in the Russian Federation to ensure the achievement of the goals and objectives of its development.
Section 2 Technology and scientific and technological progress	Topic 2.1. Innovations as an object of innovative management Topic 2.2. The influence of technical progress on the creation of fundamentally new technologies. Topic 2.3. The main directions of the technological process in the agro-industrial complex. High-tech technologies, their role and importance in modern production. Topic 2.4. Innovative technologies in the production of food raw materials and food products. Topic 2.5. Metrological aspects of food safety. Topic 2.6. Production methods and technologies at all stages of safe food production. Topic 2.7. Metrological assurance of quality control of food products. Topic 2.8. Modern methods and means of non-destructive express control of product safety and quality. Topic 2.9. Decision making and development of safety recommendations.
Section 3 Technical regulation in the development of scientific and technical innovation in the agro-industrial complex	Topic 3.1. The role of advanced technologies in the global economic system. Topic 3.2. The role of technology and technological infrastructure in the modern economy. Topic 3.3. High technology products and macro technology. Topic 3.4. Ways of integration into the world market of high technology products. Topic 3.5. Metrology, standardization and certification as activities to ensure the quality and safety of products.

<p>Section 4 System analysis of the effectiveness of technological innovation</p>	<p>Topic 4.1. Generalization of economic, organizational, scientific and technical factors of technology options into indicators of the technical and economic level. Topic 4.2. Legislative and regulatory framework for conformity assessment. Enterprise development management trends Topic 4.3. Classification groups of innovations: technological (product and process); degree of novelty (internationally and for the Russian Federation); significance based on scientific discoveries and inventions (new technological level).</p>
<p>Section 5 Organization of the production process at the enterprise</p>	<p>Topic 5.1. Formation of quality in the production process Topic 5.2. The production process as a set of labor and natural processes. Topic 5.3. Basic requirements for the organization of the production process Topic 5.4. The production program and methods of its formation. Topic 5.5. Anti-crisis solutions in technologies and equipment for the food industry Topic 5.6. Creation of high-tech processes for the production of new competitive products Topic 5.7. Classification and principles of operation of technological equipment and rules for its safe operation.</p>

**Директор**  
Агроинженерного департамента

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