

Discipline annotation	
Discipline name	Data analysis and statistics
Educational program, including the discipline	35.04.09 «Landscape architecture»
Total time	6 ECTS(216 hours)
Class work	172 hours
<i>Lectures</i>	43 hours
<i>Practical works</i>	129 hours
<i>Seminars</i>	
<i>Laboratory works</i>	

1. Goals and aims of the discipline:

The goal of the discipline is to obtain basic theoretical knowledge and practical skills in data collecting, processing and analysis, carrying out experimental and analytical research in the sphere of landscape architecture

The aims of the discipline include the following:

- to learn the main stages of world notion development, obtain the basic knowledge on the key current scientific paradigms;
- to master the structure of scientific research work, planning and carrying out scientific experiments;
- to learn the main terminology implemented in contemporary soil, environmental and landscape applied science;
- to master the methodology of data collection and analysis and results' interpretation;
- to learn the basics of mathematical statistics (descriptive statistics, correlation analysis, analysis of variance);
- to master the techniques to visualize the results of scientific research, to learn how to make graphs, tables, figures, maps and schemes and how to make presentations;
- to learn up-to-date approaches to search and analyze scientific information, including conference thesis, scientific publications, books, to be able to use the major bases of knowledge

2. Summary

The main theoretical and practical problems, covered by the discipline include: i) definition of a scientific picture of the world; social and historical reasons behind scientific development; scientific development stages: antique, middle ages, renaissance; problems of scientific development; ii) principles to organize scientific research; object and subject of scientific research; types of research activities; iii) measuring scales: ordinal, integral and ratio scales; ordinal, quantitative and qualitative features; iv) data distribution, statistical hypothesis and tests; v) correlation, regression and analysis of variance; vi) publication as an method of written interpretation of scientific information; motivations in preparation of scientific publications. Interests of scientific author and reader – similarities and differences; types of written scientific work: summary, conference thesis, scientific paper (research, review, case-study, letter to the editor); vii) approaches to visualize scientific results; tables: structural elements and design rules; graphical visualization of research results, graphs; structural units of graphs; data rows; graph axes; editing axes; editing data rows; viii) international scientific community; research centers, research groups, laboratories, departments, faculties, institutes, universities, academies; organization of education processes: research plan, research reports, research certification, publications, conferences, forums; organization of scientific research in Russia and post-soviet countries, EU, USA; scientific societies: regional, national, field-specific, international. Membership in scientific societies.

Discipline annotation	
Discipline name	Foreign Language (English)
Educational program, including the discipline	35.04.09 «Landscape architecture»
Total time	6 ECTS (216 hours)
Class work	172 hours
Lectures	-
Practical works	172 hours
Seminars	-
Laboratory works	-
1. Learning Goals and Objectives of the discipline	
<p><i>Goal 1:</i> English language acquisition from the B2 level at Upper-Intermediate, and developing of four domain active language skills such as reading, writing, listening, and speaking.</p> <p><i>Goal 2:</i> Focus of communicative activities where students learn and practice the language they need to have conversations in English and to succeed in social, professional and academic settings, using natural, real-world grammar and vocabulary.</p> <p>The language learning and teaching <i>overall goals</i> for B2 level as a guide to what students might want to achieve should be:</p> <p>1.1 to deal with the business of everyday life in another country, and to help foreigners staying in their own country to do so;</p> <p>1.2 to exchange information and ideas with young people and adults who speak a different language and to communicate their thoughts and feelings to them;</p> <p>1.3 to achieve a wider and deeper understanding of the way of life and forms of thought of other peoples and of their cultural heritage.</p> <p><i>The Objectives for language students:</i> Business of everyday life - communicative areas that are dealt with in this course. Communicating thoughts and feelings - the ability to communicate in a way which reflects ones personality, feelings and opinions. Understanding other cultures - reading the texts with international contexts and reflecting other cultures throughout the world - including Britain. Students come to realise they share many of the same desires and concerns. Native speaker notes draw attention to ways fluent speakers express themselves, which may be different to the neutral international language that we generally present.</p>	
2. Summary	
GUIDELINES FOR STUDYING THE TOPIC	
<p>Course has a strong practical thread. 16 units based round common topics. Each unit contents gives clear practical outcomes leading to Conversation Practice, develops reading or listening and teaches grammar and vocabulary connected with the topic. Practice activities are given in sections VOCABULARY and GRAMMAR, the lead-ins to READING and LISTENING and in discussions about the texts.</p> <p>The sections Vocabulary are carefully chosen to enable students to talk about the topic in the context of English as a lingua franca. Tasks generally move from meaning, to contextualized usage to personalised practice or focus on wordbuilding.</p> <p>The sections GRAMMAR and REFERENCE include exercises on all the grammar.</p> <p>The sections WRITING deal with both practical types of writing (formal and informal emails) and exam-type writing (arguing your case).</p> <p>Developing conversations sections present typical questions, responses and patterns common to conversation. An explanation clarifies the focus while exercises give controlled practice.</p> <p>Conversation practice sections present the tasks which let students practise social and</p>	

practical conversations based on their own experience or through role-play. most of the **Developing conversations** and **Conversation practice** work towards practising typical conversations students have to establish and maintain friendships.

The sections **Speaking** give students the chance to exchange ideas. The final speaking task in each unit is a variety of longer tasks that draw the language and / or the themes of the unit together.

The sections **Listening** are introduced with a short description of the context. There is usually a pre-listening speaking task to generate interest or predict content, followed by tasks to guide students to understand the text and focus on vocabulary.

The sections **Reading** are introduced with a short description of the context. There is usually a pre-reading speaking task to generate interest or predict content, followed by tasks to guide students to understand the text and focus on vocabulary.

TOPICS OF STUDY

01 ENTERTAINMENT	09 CAREERS AND STUDYING
02 SIGHTSEEING	10 SOCIALISING
03 THINGS YOU NEED	11 TRANSPORT AND TRAVEL
04 SOCIETY	12 HEALTH AND MEDICINE
Review 01	Review 03
05 SPORTS AND INTERESTS	13 LIFE EVENTS
06 ACCOMMODATION	14 BANKS AND MONEY
07 NATURE 48	15 FOOD
08 LAW AND ORDER	16 BUSINESS
Review 02	Review 04

COURSE SHEDULING (I Term)

<u>Week 1-2</u> UNIT 1 OVERVIEW ENTERTAINMENT	The main aim of this unit is to enable students to talk about pictures and to describe films, music and books . They have practice in disagreeing politely and talking about their impressions of paintings . The main grammatical focus is talking about habits and ways of using adjectives and adverbs to express their opinions.
<u>Week 3-4</u> UNIT 2 OVERVIEW SIGHTSEEING	The main aim of this unit is to enable students to talk about showing people around your town / city and to describe places, festivals and carnivals in more detail . They have practice in agreeing using synonyms and to hear and recognise short forms more easily . The main grammatical focus is using non-defining relative clauses and ways of using future forms .
<u>Week 5-6</u> UNIT 3 OVERVIEW THINGS YOU NEED	The main aim of this unit is to enable students to talk about wide range of objects and to describe what things are for . They have practice in explaining what went wrong . The main grammatical focus is so, if and to for describing purpose and indirect questions . They have practice in expressing useful things, problems with things and word families .
<u>Week 7-8</u> UNIT 4 OVERVIEW SOCIETY Review 01	The main aim of this unit is to enable students to talk about the government and their policies and how the economy is doing and to discuss social issues . They have practice in responding to complaints . The main grammatical focus is so and such and the..., the... + comparatives and ways of using expressions to describe economics, society and the government .
<u>Week 9-10</u> UNIT 5 OVERVIEW	The main aim of this unit is to enable students to talk about what they do in their free time and how fit they are and to talk about lucky escapes . They have practice in checking they heard things correctly .

SPORTS AND INTERESTS	The main grammatical focus is <i>should(n't) have, could(n't) have</i> and <i>would(n't) have</i> and the present perfect simple and continuous and ways of expressing health and fitness, football and life, and lucky escapes.
<u>Week 11-12</u> UNIT 6 OVERVIEW ACCOMMODATION	The main aim of this unit is to enable students to talk about places they have stayed in and settling in somewhere. They have practice in discussing and dealing with problems. The main grammatical focus is modifiers and have/get something done and ways of expressing where you stayed and understanding idioms.
<u>Week 13-14</u> UNIT 7 OVERVIEW NATURE 48	The main aim of this unit is to enable students to talk about weather and natural disasters and plants and animals as well as issues connected to animals. They have practice in exaggerating. The main grammatical focus is narrative tenses and participle clauses and ways of expressing weather, natural disasters, plants and trees.
<u>Week 15-16</u> UNIT 8 OVERVIEW LAW AND ORDER Review 02	The main aim of this unit is to enable students to talk about crimes and what they involve and the powers the police have. They have practice in describing different kinds of punishment and giving opinions about prison life. The main grammatical focus is modals + present and past infinitives and nouns and preposition and ways of expressing crimes, agreeing and disagreeing and adding comments and questions.
COURSE SCHEDULING (II Term)	
<u>Week 17-18</u> UNIT 9 OVERVIEW CAREERS AND STUDYING	The main aim of this unit is to enable students to talk about good and bad aspects of working life and explain feelings about the future. They have practice in giving better presentations. The main grammatical focus is conditionals with present and past tenses and ways of expressing working life and starting presentations.
<u>Week 19-20</u> UNIT 10 OVERVIEW SOCIALISING	The main aim of this unit is to enable students to describe how people celebrate events, suggest different times / places to meet and start and end different kinds of conversations. They have practice in dealing with awkward social situations. The main grammatical focus is the future perfect and question tags and ways of making mistakes and talking about parties.
<u>Week 21-22</u> UNIT 11 OVERVIEW TRANSPORT AND TRAVEL	The main aim of this unit is to enable students to talk about problem with vehicles and good and bad drivers and renting a car. They have practice in describing the features of different kinds of vehicles. The main grammatical focus is uncountable nouns and emphatic structures and ways of expressing problems with vehicles and driving.
<u>Week 23-24</u> UNIT 12 OVERVIEW HEALTH AND MEDICINE Review 03	The main aim of this unit is to enable students to talk about health problems in more detail and issues connected to health systems and pass on sympathetic messages. They have practice in telling jokes. The main grammatical focus is <i>supposed to be, should, shouldn't</i> and determiners and ways of expressing health problems and parts of the body and illnesses.
<u>Week 25-26</u> UNIT 13 OVERVIEW LIFE EVENTS	The main aim of this unit is to enable students to describe major life events in more detail, discuss gossip and news about people and complain about annoying habits. They have practice in reporting facts they are not 100% sure of. The main grammatical focus is the past perfect simple / continuous and <i>be always -ing, wish</i> and <i>would</i> and ways of expressing life events like birth, marriage and death.
<u>Week 27-28</u>	The main aim of this unit is to enable students to talk about dealing

UNIT 14 OVERVIEW BANKS AND MONEY	with banks and express regrets and apologise and explain problems in formal settings. They have practice in using descriptive literary language. The main grammatical focus is passives and wish and ways of talking about banks and money.
<u>Week 29-30</u> UNIT 15 OVERVIEW FOOD	The main aim of this unit is to enable students to explain how to cook things, name different kinds of food, link ideas more clearly and give approximate meanings. They have practice in naming different kinds of foods. The main grammatical focus is reporting verbs and revision of linking words and ways of expressing food and cooking, prefixes and food in the news.
<u>Week 31-32</u> UNIT 16 OVERVIEW BUSINESS Review 04	The main aim of this unit is to enable students to talk about markets, companies and products more fluently, be more polite in business contexts and explain why you are phoning. They have practice in pronouncing email addresses and websites. The main grammatical focus is the future continuous and expressing necessity and ability and ways of building up a business and business collocations.
<u>Week 31-32</u>	The Credit Test.

Discipline annotation	
Discipline name	International regulation in city-planning and environmental protection
Educational program, including the discipline	35.04.09 «Landscape architecture»
Total time	<i>6 ECTS(216 hours)</i>
Class work	<i>129 hours</i>
	<i>Lectures 43 hours</i>
	<i>Practical works 86 hours</i>
	<i>Seminars</i>
	<i>Laboratory works</i>
1. Goals and aims of the discipline:	

The goal of the discipline is to develop the basic concepts, contents and structures of city economy, to study regularities and problems of development of city-planning and environmental protection, to master bases of practical approaches in the sphere of management of city services; to acquaint with methods of the economic regulation of urban economy, used in our country and abroad.

The aims of the discipline include:

to master basic concepts and definitions of city-planning and environmental protection,; acquaintance with the bases of the urban economy and management;

- to study the structure of city-planning and environmental protection, features of their formation and functioning;
- to learn specifics of development of city-planning and environmental protection, in Russia;
- to learn specifics of development of city-planning and environmental protection, in EU;
- to know purposes, tasks and principles of urban management;
- to obtain practical skills for calculations of indicators of development of city economy.

2. Summary

- The main theoretical and practical problems, covered by the discipline include the following: i) concept of city-planning and environmental protection;

. Features and urban governance mechanism; ii) methods of assessment of economical geographical position of the city; iii) labor resources in the city; iv) concept of the price and pricing in economy of city services; v) ensuring steady functioning of city economy; forecasting and planning bases in economy of city services.; long-term and shortterm programs; city target programs, features of their financing and realization; investment policy in the city; vi) Urban management: search of optimum decisions; practice of city strategic planning; vii) features of economy of housing and communal services; features of the business economics, engaged in external improvement of the territory of the city; features of city-planning and environmental protection

Discipline annotation	
Discipline name	Landscape design, architecture and city planning
Educational program, including the discipline	35.04.09 «Landscape architecture»
Total time	8 ECTS(288 hours)
Class work	172 hours
<i>Lectures</i>	43 hours
<i>Practical works</i>	129 hours
<i>Seminars</i>	
<i>Laboratory works</i>	
1. Goals and aims of the discipline:	
<p>The goal of the discipline is a comprehensive study of urban and natural systems with sequential analysis of tools of Landscape Design influencing improvement and sustainability of the urban environment.</p> <p>The aims of the discipline is to determine the place of landscape design, as one of the fastest growing areas of human creativity to build its high-grade environment, as well as an objective need for flexibility adequate reaction to environmental degradation in urban areas</p>	
2. Summary	
<p>The main theoretical and practical problems, covered by the discipline are incorporated in two thematic clusters: i) landscape design and ii) advances in architecture and city planning. Landscape design cluster includes the following topics: the transition to the creation of urban open spaces to meet new social, economic, environmental and aesthetic requirements means reviewing many approaches in the field of landscape architecture and design; the emergence of new motivation in human behavior and the possibility of their involvement in the process of creating a qualitatively new urban environment means the need to learn a new language of landscape design through modern methods of interpretation and integration of landscape resources. Advances in architecture and city planning cluster includes the following topics: the theory of landscape composition; planar and volumetric-spatial design; way, shape, scale and proportion; light contrast; the ratio of volume and spatial forms; tasks and design stages; relationship with the architectural design of the building; stage of the project; materials research; feasibility study and landscape-ecological survey of the territories; design assignment; technique of designing different functions of objects of landscape architecture; supervision; methods of reconstruction and restoration of objects, layout; composition and content of the project documentation; the order of approvals, projects, estimates; design code; the use of computer design programs</p>	

Discipline annotation	
Discipline name	Phytopathology and Plant Protection
Educational program, including the discipline	35.04.09 «Landscape architecture»
Total time	6 ECTS(216 hours)
Class work	
<i>Lectures</i>	129 hours
<i>Practical works</i>	43 hours
<i>Seminars</i>	86 hours
<i>Laboratory works</i>	
1. Goals and aims of the discipline:	
<p>The goal of the discipline is to obtain basic theoretical knowledge and practical skills in phytopathology and plant protection.</p> <p>The aims of the discipline include the following:</p> <ul style="list-style-type: none"> - study of theoretical and practical basis for detection of different plant diseases ; - study of modern plant protection technology and combinative application of different protective measures; - fundamental and practical acquisition for pests, diseases and weed control 	
2. Summary	
<p>The main theoretical and practical problems, covered by the discipline include: i) main symptoms on different plant groups; possible losses from diseases; direct and non direct losses; noninfectious diseases; environment conditions/ causing plant diseases; ii) viruses, viroids, bacteria, fungi; pathogenesis in different plants; iii) symptoms, contamination, possible losses, identification of fungal bacterial and viral diseases; iv) main groups of pests, symptoms of contamination, possible losses; vi) methods of plant protection, host plant resistance; cultural, physical, chemical, biological means of plant diseases, pests and weed control. Quarantine for pathogens management; vi) cultural control; preparation of plant material, plant residues, fertilization, plant density; vii) physical method of plant protection; cooling and freezing, drying and desiccants; modified atmospheres; chemical control; main groups of chemicals; application forms; pests, diseases and weed chemical control; biological control; biological agents for diseases, pests and weed control; viii) plant quarantine; main groups of quarantine pests, diseases and weeds; what is quarantine; integrated pest management; combination of strategies and tactics; different means of plant protection, combined with each other; environment pollution</p>	

Discipline annotation	
Discipline name	Scientific writing skills/ Introduction in scientific research
Educational program, including the discipline	35.04.09 «Landscape architecture»
Total time	6 ECTS(216 hours)
Class work	<i>172 hours</i>
<i>Lectures</i>	
<i>Practical works</i>	
<i>Seminars</i>	<i>172 hours</i>
<i>Laboratory works</i>	
1. Goals and aims of the discipline:	
<p>The goal of the discipline is to obtain basic skills in scientific writing as the main way of research presentation and scientific communication.</p> <p>The aims of the discipline include the following:</p> <ul style="list-style-type: none"> - to learn how and what for to write scientifically; - to learn how scientific writing is organized: what is an impact factor, Hirsh index, Scopus, Web of Science etc; - to learn how to present yourself in a professional CV; - to master the scientific reading, regarding information, vocabulary and data obtained; - to learn how to write a conference abstract, a scientific paper and a research grant proposal; 	
2. Summary	
<p>The main theoretical and practical problems, covered by the discipline include i) methods and approaches to plan scientific research and organize research data ii) the main concepts of scientific writing: how to read, how to write, how to cite; iii) developing a curriculum vitae as a presentation of professional skills; vi) basic of scientific reading: how to browse for the literature by title, key words and authors; how to use Scopus, elibrary.ru and WoS sources; how to extract necessary information from the paper's abstracts; how to improve your vocabulary while reading and what data can be collected through the literature review; vii) how to prepare a conference abstract, poster, oral presentation, research paper, thesis; viii) what are research projects and grant and how to apply for them; ix) what is an international scientific community; organization of scientific research in Russia and post-soviet countries, EU, USA; scientific societies: regional, national, field-specific, international. Membership in scientific societies.</p>	

Discipline annotation	
Discipline name	Urban ecology
Educational program, including the discipline	35.04.09 «Landscape architecture»
Total time	8 ECTS(288 hours)
Class work	129 hours
<i>Lectures</i>	43 hours
<i>Practical works</i>	86 hours
<i>Seminars</i>	
<i>Laboratory works</i>	
1. Goals and aims of the discipline:	
<p>The goal of the discipline is mastering theoretical backgrounds and obtaining practical skills in analysis of features, factors and functional specifics of urban ecosystems and their components. The aims of the discipline include:</p> <ul style="list-style-type: none"> - to understand and implement the basic terms, definitions and principles of city and settlements' ecology; - to know basics of projecting and landscape architecture constructing; - to analyze and quantify ecological factors in urban environment; - to manage ecological and aesthetic functions of urban green plantations; - to know and implement urban environmental monitoring systems; - to manage the main processes of urban landscape construction 	
2. Summary	
<p>The main theoretical and practical problems, covered by the discipline include the following: i) urbanization as a processes of city expansion and urban development; nature urbanization as transformation of natural landscapes into urban infrastructure; ii) anthropogenic sediments; classification of anthropogenic sediments; genesis of anthropogenic sediment; cultural layer; iii) urban water bodies, water consumption, water use and its categories; iv) monitoring of the air quality; weather forecasting and meteorological monitoring, prediction and modeling of air pollution and air quality dynamic, urban climate; v) ecological and technogenic factors of plant growth in urban environment; vi) urban soils' pollution, standardization and protection</p>	