**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE**
**SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY OF ECONOMICS**

"APROVED"

Vice-Rector for Education and Methodical Work

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Karina NEMASHKALO

# «Web analytics for business»

## syllabus of the descipline

| | |
|---|---|
| Field of knowledge | *all* |
| Specialty | *all* |
| Educational level | *first (bachelor's)* |
| Educational program | *all* |

| | |
|---|---|
| Discipline status | *selective* |
| Language of instruction, teaching and assessment | *English* |

Head of department
*statistics and economic
forecasting*

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Kharkiv
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The syllabus has been approved by the Department of Statistics and Economic Forecasting
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**Letter of renewal and re-approval of the syllabus**
**of the academic discipline**

| Academic year | Date of the session of the department - developer of syllabus | Protocol number | The signature of the head of the department |
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# Abstract of the discipline

In the modern conditions of the development of a digital society, the importance of Web analytics is increasing as a system of collecting, analyzing and interpreting statistical information about site visitors of various business structures in order to identify and understand the reasons for their actions and further optimize activities.

The discipline "Web analytics for business" is aimed at mastering modern digital practices and technologies of working with information, effective tools of web analytics, understanding that analytics is a key skill in business product management. In the process of studying the discipline there is a practical mastering of the methodology of search engine optimization on the Internet, which involves clarifying the nature, content, purpose and objectives of web analytics, mastering the methodological tools for measuring and analyzing web data to make decisions aimed at optimizing the use of web tools firms.

The purpose of the discipline "Web analytics for business" is to acquire theoretical knowledge and practical skills in the basics of web analysis of various web resources to assess their effectiveness and optimize business activities.

The subject of the discipline is a variety of businesses that use digital analytical tools to obtain information on the basis of which sound management decisions are made to optimize activities and further development.

The subject of the discipline are digital tools for searching and analyzing information, web analytics services that allow you to collect, measure, evaluate data, visualize them, present in order to make management decisions to improve business efficiency.

## Characteristics of the discipline

| | |
|---|---|
| Course | **2** |
| Semester | **4** |
| Number of ECTS credits | **5** |
| Final assessment | **Test** |

## Structural and logical scheme of studying the discipline

| Prerequisites | Postrequisites |
|---|---|
| Informatics | All disciplines of the curriculum for the preparation of students of the first (bachelor's) level of higher education |
| Statistics | |

## Competences and learning outcomes of the study

The discipline "Web analytics for business" provides students with comprehensive competence - the ability to solve complex specialized tasks and practical problems in the economic sphere, which are characterized by complexity and uncertainty of conditions, which involves the application of theories and methods of economics.

| Competences | Program learning outcomes |
|---|---|
| Ability to understand the organizational and technological components of the web analysis process, the main ways of its implementation, the role of various factors in the process of data collection, processing and analysis | Identify sources and understand the methodology for determining and methods of obtaining socio-economic data, collect and analyze the necessary information, calculate socio-economic indicators |
| Ability to analyze websites and compile reports using Google Analytics tools.<br>Ability to apply tools of business process analysis, | Use Google Analytics metrics and the CRI system to substantiate proposals and make management decisions by various economic |

| | |
|---|---|
| marketing techniques, management in order to conduct quantitative and qualitative research on business efficiency and make management decisions | agents (individuals, households, businesses and public authorities) |
| Ability to develop a website research methodology, visualize data and use advanced web analytics capabilities | Analyze the effectiveness of the functioning and development of business on the basis of the formation of reports by Google Sheets, the construction of dashboards, modern presentation shells; use A / B site testing and call tracking. |
| Ability to master the basic methods, ways and means of obtaining, storing, processing information, to have skills in working with a computer as a means of information management | Use information and communication technologies to solve socio-economic problems, prepare and present analytical reports |
| Ability to develop content strategies, advertising campaigns and business promotion strategies on social networks | Apply the obtained theoretical knowledge in the practical activities of web analysis |

## The program of the discipline

## Content module 1. Introduction to web analytics

### Topic 1. Introduction to web analytics.
Information society and basics of web analytics. The importance of navigation services and the evolution of search systems. Modern web analytics tools. Operating principles of systems for collecting statistics about users.

### Topic 2. Google Analytics - digital search tool.
History of Google Analytics. Google Analytics settings. Google Analytics metrics and KPI system.

### Topic 3. Google Site as an integrator of digital resources.
Types of sites and their functioning. Create and configure Google Site.

## Content module 2. Practice of web analytics application

### Topic 4. Google data analysis and visualization tools.
Google data analysis tools (graphs, tables, forms). Google Workspace business applications. Visual analytics as a tool for reporting (presentations).

### Topic 5. Areas of use of web analytics.
Business advertising promotion tools - call-tracking. Web analytics in social networks. Web analytics for small businesses and startups.

The list of laboratory classes, as well as the content of independent work is given in the table "Rating-plan of the discipline".

## Teaching and learning methods

In the process of teaching the discipline "Web analytics for business" to implement certain competencies and master the content involves the use of active classroom forms and methods of teaching (problem lectures, discussions, etc.) in combination with the implementation of individual tasks on a particular problem (preparation of analytical materials) presentations, speeches at seminars,

etc.).

Various forms and methods of teaching are used to form competencies and achieve learning outcomes during lectures and laboratory classes: introductory lectures (topics 1-2), problem lectures (topic 5), review lectures with presentations and visual support (topics 1-5), situational tasks, cases.

Laboratory classes are conducted in the form of training sessions using specially developed guidelines for laboratory work, during which methods of organization and implementation of educational and cognitive activities, methods of stimulation and motivation of educational and cognitive activities, methods of control and self-control of educational efficiency are fully used. In particular, it is the creation of situations of cognitive novelty (topics 2-5), work in small groups (topic 1), current control (computer testing (topics 1-5)), etc. All classes use presentations of educational material, visualization of students' answers.

Independent work on obtaining competencies in the discipline "Web analytics for business" includes the development of theoretical foundations of lecture material; doing homework during preparation for seminars and laboratory classes, for express survey and test control, for writing tests.

## The order of assessment of the results of training

The assessment system of students' competences takes into account the types of classes, which according to the curriculum include lectures, laboratories, seminars, as well as independent work in preparation for various types of control and classes. Evaluation of the formed competencies of applicants is carried out according to the cumulative 100-point system.

The current assessment of applicants' knowledge is carried out during lectures, seminars and laboratory classes according to the following criteria:

The lecture is evaluated in 1 point, from them:

1 - express survey, answers to the lecturer's questions. The maximum number of points that a student can receive is 12 points.

Laboratory work is estimated at 6 points, of which:

2 points - the correctness of the answers on the topic of work and knowledge of digital tools used;

2 points - work with Internet resources, selection of statistical data and correctness of calculations;

2 points - report and timely defense of work. The maximum score for laboratory work is 54 points.

Tests are evaluated in 2 points, from them:

50% correct answers - 0.75 points;

75% of correct answers - 1.5 points;

100% correct answers - 2 points. The maximum number of points for completing tests is 10.

During the study of the discipline 2 seminars are planned, for which the student can get a maximum of 12 points. For the seminar the student prepares an essay on the proposed topics. Each essay is worth 6 points, of which:

6 - the content and structure of the essay correspond to the purpose of the research, the presentation of research results is offered and analytical explanations and conclusions concerning the set tasks are given; a comprehensive analysis of the object of study;

5 - the content and structure of the essay correspond to the purpose of the research, the presentation of research results is offered and analytical explanations and conclusions concerning the set tasks are given; a sufficient analysis of the object of study, in accordance with the purpose of the essay;

4 - the content and structure of the essay correspond to the purpose of the research, the presentation of research results is offered and analytical explanations and conclusions concerning the set tasks are given; a sufficient analysis of the object of study in accordance with the purpose of the essay, but not sufficiently correctly defined set of indicators for factors influencing business development;

3 - the content and structure of the essay correspond to the purpose of the research, analytical

explanations and conclusions concerning the set tasks are given; sufficient analysis of the object of research in accordance with the purpose of the essay, but there is no presentation of research results and insufficiently correctly defined set of indicators for factors influencing business development;

2 - the content and structure of the essay correspond to the purpose of the study, but the analytical explanations are incomplete, there are no conclusions about the tasks; there is no presentation of research results, the set of indicators by factors that affect business development is not defined correctly enough;

1 - the content and structure of the essay do not meet the purpose of the study

0 - essay not completed.

During the training, one current module control over the first and second content modules is provided. The applicant can receive a maximum of 12 points based on the results of the current control.

**The final score** for the academic discipline is calculated taking into account the points received during the current control of the cumulative system. The applicant cannot be admitted to the test if the number of points received as a result of the success check during the current control in accordance with the content module during the semester did not reach 60 points in total.

The applicant should be considered certified if the sum of points obtained from the results of the final / semester performance test is equal to or greater than 60. The final score is set according to the scale given in the table "Grade scale: national and ECTS".

Forms of assessment and distribution of points are given in the table "Rating-plan of the discipline".

### Grading scale: national and ECTS

| Total score for all types of training activities | ECTS assessing scale | Assessment according to national scale | |
|---|---|---|---|
| | | for exam, course project (work), practice | for pass |
| 90 – 100 | A | excellent | pass |
| 82 – 89 | B | good | |
| 74 – 81 | C | | |
| 64 – 73 | D | satisfactory | |
| 60 – 63 | E | | |
| 35 – 59 | FX | unsatisfactory | not pass |

### Accumulation of rating points of the discipline

| Topic | Types of training | | Forms of evaluation | Max points |
|---|---|---|---|---|
| Topic 1. Introduction to web analytics | *Classroom work* | | | |
| | Lecture | Topic 1. Introduction to web analytics | Express survey | 1 |
| | | | Express survey | 1 |
| | Laboratory session | Seminar on the topic 1. Questions for discussion: 1. Information and analytical activities: the history of origin, formation and development. 2. Periodization of the evolutionary development of information and analytical activities. 3. Web analytical activity as a branch of information industry. | Essay defense | 6 |

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|---|---|---|---|---|
| | Laboratory session | Seminar on the topic 1. Questions for discussion:<br>1. Development of web analytics in Ukraine and the world. 2. Modern research of web analytical activity | Essay defense | 6 |
| | | | Test | 2 |
| | *Individual work* | | | |
| | Questions and tasks for self-study | Search, selection and review of literary sources on a given topic. Preparation for laboratory classes | | |
| **Topic 2. Google Analytics - digital search tool** | *Classroom work* | | | |
| | Lecture | Тема 2. Google Analytics is a digital search tool | Express survey | 1 |
| | | | Express survey | 1 |
| | | | Express survey | 1 |
| | Laboratory session | Laboratory work on topic 2: Familiarity with Google Analytics. | Protection of laboratory work | 6 |
| | Laboratory session | Laboratory work on topic 2: Analyze sites using Google Analytics metrics | Protection of laboratory work | 6 |
| | Laboratory session | Laboratory work on topic 2: Reporting with Google Analytics | Protection of laboratory work | 6 |
| | | | Test | 2 |
| | *Individual work* | | | |
| | Questions and tasks for self-study | Search, selection and review of literary sources on a given topic. Preparation for laboratory classes | | |
| **Topic 3. Google Site as an integrator of digital resources** | *Classroom work* | | | |
| | Lecture | Topic 3. Google Site as an integrator of digital resources | Express survey | 1 |
| | Laboratory session | Laboratory work on topic 3: Creating a Google Site | Protection of laboratory work | 6 |
| | | | Test | 2 |
| | *Individual work* | | | |
| | Questions and tasks for self-study | Search, selection and review of literary sources on a given topic. Preparation for laboratory classes | | |
| **Topic 4. Google data analysis and visualization tools** | *Classroom work* | | | |
| | Lecture | Topic 4. Google data analysis and visualization tools | Express survey | 1 |
| | | | Express survey | 1 |
| | | | Express survey | 1 |
| | Laboratory session | Laboratory work on topic 4: Data analysis using Google tools | Protection of laboratory work | 6 |

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|---|---|---|---|---|
| | Laboratory session | Laboratory work on topic 4: Visualization of information space based on Google Workspace applications | Protection of laboratory work | 6 |
| | Laboratory session | Laboratory work on topic 4: Filling the created site with content | Protection of laboratory work | 6 |
| | | | Test | 2 |
| | *Individual work* | | | |
| | Questions and tasks for self-study | Search, selection and review of literary sources on a given topic. Preparation for laboratory classes | | |
| **Topic 5. Areas of use of web analytics** | *Classroom work* | | | |
| | Lecture | Topic 5. Areas of use of web analytics | Express survey | 1 |
| | | | Express survey | 1 |
| | | | Express survey | 1 |
| | Laboratory session | Laboratory work on topic 5: Using Google Analytics tools to study social networks | Protection of laboratory work | 6 |
| | Laboratory session | Laboratory work on topic 5: Analysis of the effectiveness of the site | Protection of laboratory work | 6 |
| | | | Test | 2 |
| | | | Written test | 12 |
| | *Individual work* | | | |
| | Questions and tasks for self-study | Search, selection and review of literary sources on a given topic. Preparation for laboratory classes | | |
| Total number of points | | | | 100 |

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