**National University**

**Faculty of International Relations**

**Department of International Economic Analysis and Finance**

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| --- | --- |
| Course title | **Modern systems of accounting** |
| Lecturer | Ihor Hurnyak  https://orcid.org/0000-0003-0926-2456 |
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| E-mail | hurnyakihor@gmail.com |
| Course web-page | https://intrel.lnu.edu.ua/course/finansovyj-analiz |
| Lecturer advice and technological support | The time and place of offline meetings will be announced later.  Social networks |

**Short annotation to the course**

*This course focuses on accounting automation issues. An analysis of the first such systems and clear trends in the automation market was made. The issues of automation of processes of interaction with the client, supplier, business - analytics and production are discussed. Current trends in artificial intelligence, automation, and education systems are analyzed.*

**Aim and goals of the course -**

*to acquaint students with the automation process;* learn to apply the most friendly programmable tools;to encourage students to apply the studied methods in future professional activities;to improve students' teamwork skills and possess programming experience

**The main task** of the course is to provide students with practical skills in the field of ERP.

**Competences of the educational program provided by the course**

*Ability to critically independent creative and innovative thinking, analysis and synthesis, detection of methodological errors, distinguishing facts from subjective assumptions and evaluative judgments.*

*Ability to collect and process information and facts from a variety of sources and to be able to interpret in context.*

*Ability to work in a team, effectively using its time, material and human resources.*

*Ability to apply modern information and communication technologies in professional activities.*

*Ability to identify problems, the ability to sort them by priority, to be able to develop ways and mechanisms of their practical solution.*

*Ability to critically evaluate processes based on quantitative and qualitative indicators and thus to make optimal decisions for development.*

**Course information**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Year* | *Semester* | *Specialty* | *Studying year* | *Normative /*  *selective* |
| *2022-2023* | *11th* | *International Economic Relations* | *6th* | *N* |

**Volume of the course**

|  |  |
| --- | --- |
| *Type of lesson* | *Total number of hours* |
| *Lectures* | *30* |
| *Seminars* | *40* |
| *Home work* | *70* |

**Course format** *- blended.*

**Evaluation***:*

*The total number of points per course is 100.*

*Of them: work in the auditorium (or online) at the discussions, team completions, home project presentations – 50, exam (creative questions) – 50.*

**Hardware and software**: *a computer and a multimedia projector in the classroom. Sometimes the group or part of group will be asked to come to the lecture with own laptops.*

**Course policies** - *the student is obliged to read the required literature, to be active during discussions and to participate properly in a team work, not to use plagiarism during practical work (!).*

**Learning Outcome***:*

*Influence the business unity ability to involve resources, to analyse current state and to predict future misbalances.*

**COURSE SCHEME**

Introduction lecture Reality of ERP - market

To read and watch additionally:

<https://aws.amazon.com/?nc2=h_lg>

<https://azure.microsoft.com/en-us>

<https://www.youtube.com/watch?v=M988_fsOSWo>

Recent ERP survey of CIOs across the UK

<https://www.accenture.com/_acnmedia/pdf-90/accenture-unleashing-exponential-evolution-pdf.pdf>

Lecture 1 How to get necessary data?

Yahoo\_fin, Investing.com, and others

To read and to watch additionally:

[*https://theautomatic.net/yahoo\_fin-documentation/*](https://theautomatic.net/yahoo_fin-documentation/)

Lecture 2 ERP from the beginning

From MRP to MRPII. From MRPII to ERP. CRM and SCM systems. What is BI?

To read additionally:

Example: ServiceNow

<https://www.servicenow.com/now-platform.html#>!

Example: Microsoft Dynamics

<https://www.youtube.com/watch?v=BLDEFHA4GVw>

Lecture 3 ERP market in Ukraine

Do we have a real substitute for 1C?

Team work: best ERP in Ukraine for my business - ?

To read additionally:

<https://www.altamira.ai/blog/the-ukrainian-it-market-the-latest-statistical-insights>

Lecture 4 ERP for small and middle companies

ODOO, SAGE, Epicor and others.

Why this market is so dynamic?

Home work: your choice in the market ERP for SMEs

To pay attention and to read additionally:

<https://www.dynamicssquare.com/blog/10-best-erp-systems-for-small-businesses-in-2022/>

SAGE understanding

<https://www.youtube.com/watch?v=zYYeL7mIYK0&t=175s>

Best ERP for small business in USA

<https://financesonline.com/12-best-erp-software-for-small-business/>

Lecture 5 Business intelligence

How to work with … and in …

DATA Warehouses. DATA Marts. Tableau and Power BI competition.

Team work*: making presentations using Power BI*

To watch additionally:

What is BI?

<https://www.youtube.com/watch?v=jkCCnwvO_fg>

Lecture 6 How not to be fired in 15 years?

In form of discussion.

*Creative questions for exam*

6th year course

1. The aim of ERP?
2. Pluses of cloud-based ERP? Minuses?
3. Internet of Things is …
4. According to Rogers we have only 2.5% of innovators in our society (and only 13.5% of early adopters). If this indicator is so small why society development dynamics is so high, at least technologically …?
5. According to portfolio ingredients **Sharpe Ratio for 2022** the biggest investment interest that we have as society is concentrated in markets of semiconductors, gaming, cryptocurrencies but also real estate rental, multimedia. Could you explain and describe resulting world? *What is the role of ERP – market in such world?*
6. Why don’t we have even this moment a real substitute for russian 1C in Ukraine? (Especially with Ukrainian origin). If you don’t agree please propose your arguments …
7. What potential (real) competitors for 1C do we have in Ukraine?
8. Why Odoo is so attractive for beginners?
9. ERP – choice for small business is …?
10. ERP – choice for beginners is …?
11. Why Python and Java are so important?
12. Main tendencies of ERP – market in 2019 – 2022 …
13. Describe your imaginable ERP – system

* CRM for … (aims)
* SCM for …
* HRM for …
* MRP for …
* BI for …

1. How do you understand Business Intelligence?
2. Syspro, Epicor, Atlas, … What are main hopes of these newcomers …
3. Why do we have according to **Google Ngram Viewer** graphic so bigger interest for Data visualization than to Data analysis?
4. Who is a cloud captain?
5. If robot process automation will take from human 41% in CRM, 40% in MRP, 38% in HR, 36% in SCM, and even 32% in routine communication what skills have you to possess not to be fired in 10-15 years?
6. How to use your data as asset …
7. How do you understand machine learning …
8. Sell your ERP … What will you do?
9. Buy ERP … What will you do?

Sources:

1. Maziyar Ghasemi, Vahid Shafeiepour, Mohammad Aslani, Elham Barvayeh The impact of Information Technology (IT) on modern accounting systems, Procedia - Social and Behavioral Sciences, Volume 28, 2011, Pages 112-116, ISSN 1877-0428, <https://doi.org/10.1016/j.sbspro.2011.11.023>. (<https://www.sciencedirect.com/science/article/pii/S1877042811024621>)
2. M. S. Yadav. (2018). The Impact of Information Technology on Modern Accounting Systems With reference to Pune Region Prof. International Journal of Research in IT and Management (IJRIM) Vol. 6 Issue 8, August 2016, pp. 87-94.
3. Covaleski, John M. "Giant ERP vendors suffer setbacks in middle market." Accounting Today. Jan. 2000.
4. Dance, D. Richard. "Five keys to evaluating client/server accounting." Accounting Today. May 1996.
5. Francett, Barbara. "ERP gets the point." Software Magazine. Feb. 1998.
6. Gibbs, Jeff. "Going Live with SAP." Internal Auditor. June 1998.
7. Gibbs, Jeff. "The power of enterprise computing." Internal Auditor. Feb. 1997.
8. Glover, Steven M., Douglas F. Prawitt, and Marshall B. Romney. "Implementing ERP." Internal Auditor. Feb. 1999.