Internship opportunities in UNFU (Ukraine)

Andriy Golovko, Ph.D, Head of the department of Management of Organizations and Administration of Ukrainian National Forestry University
The area of the country is 60.4 million hectares. The population is 45 million. The population density is 71 persons per km². GDP - $130.83 billion (2018).
Forests of Ukraine

- The total area of the forestry lands of Ukraine is 10.4 million hectares, of which 9.6 million hectares are covered with forests;
- Forest coverage – 15.9%;
- Growing stock – 2.1 billion cubic meters;
- Average annual increment – 4 cubic meters;
- The volume of harvest in 2019 amounted to 21 million cubic meters.

Source: www.fao.org
Ukrainian National Forestry University (UNFU)

- is a leader in the area of environmental education in Ukraine
- was founded in 1874
- includes 4 scientific and research institutes
- has about 3,000 students
- and 300 teachers
- provides educational services on 16 specialties at bachelor level and 13 specialties at master level
Scientific and research institutes of UNFU

- Forestry and Park Gardening
- Ecological Economics and management;
- Wood Processing Technologies and Design
- Mechanical Engineering, Automation and Computer-Integrated Technologies
Strategic ecosystem management of protected areas and (or) forestry enterprises

Supervisors: Associate professor Andriy Golovko (PhD); Senior teacher Iulia Shvediuk (PhD)
Contact person: Associate professor Andriy Golovko (PhD)
golovko_andriy@nltu.edu.ua

Activities:
• Interviews with representatives of practice and local citizens
• Data collection and analysis
• Analysis of expert's comments and evaluations of the various scientific fields (tourism, economics, ecology, forestry, agriculture ...)
• Work with local scientific publications
• Information search and library work
• Strategies development
• Elaborate the questionnaire, interview with local inhabitants
• Writing reports and information data sheets

Requirements:
• Organized and proactive
• Knowledge of foreign languages (English – intermediate (optional), Ukrainian or Russian – intermediate)
• Communication skills
• Self-motivated
• Ability to shape working plan and fulfill it
• Knowledge of natural conservation and forest management
• Team work

Research methods:
• Strategies Development based on Open Standards for the Practice of Conservation
• Strategies Development based MARISCO method
• DPSIR model of the state and development trends of protected area
• A’WOT method of multi-criteria optimization of developed strategies
Nature-based entrepreneurship: cross-countries comparison of its development
Supervisors: associate professor Lyudmyla Zahvoyska (PhD) and associate professor Alexander Adamovsky (PhD)
E-mails: adamchic@ukr.net; lyudmyla.zahvoyska@nltu.edu.ua

Activities:
• Analysis of institutional environments of several countries
• Semi-structured interviews with stakeholders
• Stakeholder analysis
• Modeling of the analyzed systems/processes
• Drawing conclusions from the conducted analysis

Requirements:
• Ability to plan and fulfill scientific research
• Knowledge of foreign languages (English or Ukrainian or Russian)
• Skills for analysis of quantitative/qualitative information

Research methods:
• Institutional analysis
• Stakeholder analysis
• Basic knowledge of modern approaches to ecological-economic systems analysis and modeling
Geological trail as the component of recreational and tourist infrastructure and the model of an element of the didactic routes’ network on the scale of Lviv in total and Regional Landscape Park “Znesinnya” in particular

Supervisor: Assoc. Prof. Yaroslava Didyk (PhD)
Contact person: Associate professor Andriy Golovko (PhD)
golovko_andriy@nltu.edu.ua

Activities:
• Get acquainted with the management of the protected areas of Lviv Region and Regional Landscape Park "Znesinnia"
• Interviews with citizens;
• Preparation of reports, announcements, design of informational signs;
• Feasibility study of geo-routes creation;

Requirements:
• Knowledge of foreign languages (Ukrainian or Russian – intermediate)
• Communication skills
• Team work
• Basic knowledge of natural conservation and recreational activities
• Skills of work with GIS-maps
Sustainable Development of Ukrainian Forest Sector

Supervisor: Associate professor Olena Maksymets (PhD);
Contact person: Associate professor Olena Maksymets (PhD)
alyona.maksymets@gmail.com

Activities:

• conduction of interviews with the representatives of the forest sector (using the beforehand prepared questionnaire);
• travel across Western and Northern Ukraine (Rivne, Volyn, Zhytomyr, Lviv, Ivano-Frankivsk, Chernivtsi, Zakarpattia regions) as the key regions for forest sector development in Ukraine;
• close cooperation with NUFU students

Requirements:

• ability to conduct interviews
• experience in preparation of questionnaire;
• ability to travel across Western and Northern Ukraine;
• team working
• communication skills
• writing skills
• knowledge of modern sustainability reporting methods and techniques

Research methods:

• content analysis
• qualitative and quantitative methods of field studies
• matrix methods of strategic planning
• bench-marking
• strategic management methods

Prospective directions for scientific and research collaboration:

• Influence of log export ban and other trade restrictions on the activity of forest sector enterprises.
• Satisfaction of the employees in forest sector as the key factor in strategic management
• Key Performance Indicators on forest sector companies as a precondition for sustainable development

Important: willingness to share results with the NUFU for further publications (both Universities must have all rights for the results of research; in case of publication – the Program and scientific supervisors should be mentioned)
Integrated watershed principle for forest management

Supervisors: Associate professor Oleh Chaskovskyy (PhD); Associate professor Yuriy Myklush (PhD);
Contact person: Associate professor Oleh Chaskovskyy (PhD)
oleh.chaskov@nltu.edu.ua

Activities:
• Collection and analysis of remote sensing and ground data
• Studying vulnerabilities of mountain forest systems
• Studying scientific publications of Ukrainian and German scientists
• Studying data management and computer simulation technologies
• Evaluating international watershed issues
• Submitting intermediate reports and information data sheets

Requirements:
• GIS software
• Adaptability
• Knowledge of foreign languages (English – C1 or higher, Ukrainian or Russian – B2 or higher
• Communication and relationship skills
• Decision making and judgement
• Negotiation skills
• Proactive problem solving

Research methods:
• Forest cover classification on the basis of satellite images.
• Change detection method on the basis of remote sensing
• Watershed condition classification
• Near real time forest cover analysis
• Data management and computer simulation
State, structure and productivity of mixed forests on the area of National Natural Park "Skole Beskids"

Supervisor: Associate professor Mykola Korol (PhD)
Contact person: Associate professor Mykola Korol (PhD)
nikkorol@ukr.net

Activities:
1. Analysis of protected areas in Ukrainian Carpathians;
2. Analysis of management system and forests of National Natural Park "Skole Beskids";
3. Collection and processing of experimental data.
4. Analysis of scientific publications on research topic.

Requirements:
1. Forestry background;
2. Organized and proactive;
3. Knowledge of foreign languages (Basics of Ukrainian or Russian are desirable);
4. Self-motivated;
5. Communication skills.

Research methods:
1. Methods of studying the dynamics of forest ecosystems;
2. Methods of studying the structure of forest stands and biodiversity;
3. Methods of studying the productivity of forests.
Standard-based performance of nature conservation institutions

Supervisors at UNFU: Assoc. Prof. Andriy Golovko (PhD)
Co-supervisors: Oksana Stankevych-Volosianhuk (PhD), NGO “Ecosphere”, Vasyl Poynchereda (PhD), Carpathian Biosphere Reserve
Contact person: Associate professor Andriy Golovko (PhD)
golovko_andriy@nltu.edu.ua

Research task - to examine:
1) what are the standards for management of nature conservation activities;
2) if international collaboration and operational activities of nature conservation institution follows the standards;
3) what improvements can be done to implement standards in the institutions and to disseminate it in Ukraine.

Research objects: Carpathian Biosphere Reserve (Ukraine) and Maramures National Park (Romania).
Partner organizations: NGO “Ecosphere”, Carpathian Biosphere Reserve.

Activities:
• Engagement to the activities of Ecosphere in the field of research (organizing seminars, preparing promotion materials, dissemination and training activities, developing project applications etc).
• Development of questionnaire, interviewing staff and stakeholders, data collection and analysis.
• Analysis of implementation of the standards.
• Studying the best practice of standards application in other countries, comparative analysis.
• Development of strategies for implementation and dissemination of the standards including those activities engaging the NGO.
• Writing report.

Requirements:
• Organized and proactive
• Knowledge of foreign languages (English – intermediate (optional), Ukrainian, Russian – intermediate)
• Communication skills
• Self-motivated
• Ability to shape working plan and fulfill it
• Knowledge of nature conservation and/or forest management
• Team work

Special requirements: willingness to travelling and self-financing

Research methods:
• Survey based on application of EUROPARK standards for evaluation of transboundary cooperation of nature conservation institutions and Open Standards for the Practice of Conservation.
Identification of HCVF (high conservation value forests) within the forest certification FSC

Supervisor at UNFU: Assoc. Prof. Yaroslava Didyk (PhD)
Co-supervisors: Oksana Stankevych-Volosianhuk (PhD), NGO “Ecosphere”
Contact person: Associate professor Andriy Golovko (PhD)
golovko_andriy@nltu.edu.ua

Research task: to identify cultural and social forests of HCVF category.

Research objects: forest lands of state forest companies in Zakarpattia and Lviv Oblasts.
Partner organization: NGO “Ecosphere”.

Activities:
- Engagement to the activities of Ecosphere in the field of research (organizing seminars, preparing promotion materials, dissemination activities, developing project applications etc).
- Development of questionnaire, interviewing local people.
- Writing reports and information data sheets.

Requirements:
- Organized and proactive
- Knowledge of foreign languages (English –intermediate (optional), Ukrainian, Russian – intermediate)
- Communication skills
- Self-motivated
- Ability to shape working plan and fulfill it
- Knowledge of nature conservation and/or forest management
- Team work

Special requirements: willingness to travelling and self-financing

Research methods:
- Survey.
Conflict management in the area of use of mountain rives for small hydropower stations in Carpathians

Supervisors at UNFU: Assoc. Prof. Andriy Golovko (PhD)
Co-supervisors: Oksana Stankevych-Volosianhuk (PhD), NGO “Ecosphere”
Contact person: Contact person: Associate professor Andriy Golovko (PhD)
golovko_andriy@nltu.edu.ua

Research task: case studies of conflicts, stakeholder analysis, cost-benefit analysis, evaluation of losses of local people, developing solutions.

Research objects: investment projects for construction of small hydropower stations in Carpathians.
Partner organizations: NGO “Ecosphere”.

Activities:
- Engagement to the activities of Ecosphere in the field of research (organizing seminars, preparing promotion materials, dissemination and training activities, developing project applications etc).
- Development of questionnaire, interviewing stakeholders, data collection and analysis.
- Studying the best practice of standards application in other countries, comparative analysis
- Writing report.

Requirements:
- Organized and proactive
- Knowledge of foreign languages (English – intermediate (optional), Ukrainian, Russian – intermediate)
- Communication skills
- Self-motivated
- Ability to shape working plan and fulfill it
- Knowledge of nature conservation and/or forest management
- Team work

Special requirements:
- Willingness to travelling and self-financing

Research methods:
- Survey, cost-benefit analysis.
### Forestry Enterprises and Protected Areas Subordinated to Lviv Regional Forestry and Hunting Board

<table>
<thead>
<tr>
<th>Name</th>
<th>Area (ha)</th>
<th>Dominant tree species</th>
<th>Type of relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Bibrka Forestry” State Enterprise</td>
<td>26 705</td>
<td>Fagus Sylvatica</td>
<td>Hilly terrain</td>
</tr>
<tr>
<td>“Borynya Forestry” State Enterprise</td>
<td>18 492</td>
<td>Picea Abies, Abies Alba, Fagus Sylvatica</td>
<td>Mountain relief</td>
</tr>
<tr>
<td>“Brody Forestry” State Enterprise</td>
<td>26 308</td>
<td>Pinus Sylvestris, Quercus Robur</td>
<td>Plain relief</td>
</tr>
<tr>
<td>“Busk Forestry” State Enterprise</td>
<td>25 280</td>
<td>Pinus Sylvestris, Quercus Robur, Alnus Glutinosa</td>
<td>Plain relief</td>
</tr>
<tr>
<td>“Drohobych Forestry” State Enterprise</td>
<td>29 898</td>
<td>Quercus Robur, Picea Abies, Abies Alba, Larix decidua, Fagus Sylvatica</td>
<td>Plain and hilly terrain</td>
</tr>
<tr>
<td>“Zolochivskiy Forestry” State Enterprise</td>
<td>32 441</td>
<td>Fagus Sylvatica, Quercus Robur, Pinus Sylvestris, Larix Decidua</td>
<td>Plain and hilly terrain</td>
</tr>
<tr>
<td>“Lviv Forestry” State Enterprise</td>
<td>25 362</td>
<td>Quercus Robur, Fagus Sylvatica, Pinus Sylvestris, Carpinus Betulus, Betula Pendula</td>
<td>Plain and hilly terrain</td>
</tr>
<tr>
<td>“Zhovkva Forestry” State Enterprise</td>
<td>33 693</td>
<td>Pinus Sylvestris, Alnus Glutinosa, Quercus Robur, Fagus Sylvatica</td>
<td>Plain relief</td>
</tr>
<tr>
<td>“Rava – Russka Forestry” State Enterprise</td>
<td>31 939</td>
<td>Quercus Robur, Fagus Sylvatica, Larix decidua</td>
<td>Plain relief</td>
</tr>
<tr>
<td>“Radekhiv Forestry” State Enterprise</td>
<td>35 030</td>
<td>Pinus Sylvestris, Quercus Robur, Alnus Glutinosa</td>
<td>Plain relief</td>
</tr>
<tr>
<td>“Sambir Forestry” State Enterprise</td>
<td>34 969</td>
<td>Quercus Robur, Pinus Sylvestris, Alnus Glutinosa, Larix decidua</td>
<td>Hilly and Mountain relief</td>
</tr>
<tr>
<td>“Skole Forestry” State Enterprise</td>
<td>22 881</td>
<td>Picea Abies, Abies Alba, Fagus Sylvatica</td>
<td>Mountain relief</td>
</tr>
<tr>
<td>“Slavsk Forestry” State Enterprise</td>
<td>24 655</td>
<td>Picea Abies, Abies Alba, Fagus Sylvatica</td>
<td>Mountain relief</td>
</tr>
<tr>
<td>“Stariy Sambir Forestry and Hunting” State Enterprise</td>
<td>31 913</td>
<td>Abies Alba, Fagus Sylvatica, Quercus Robur, Pinus Sylvestris</td>
<td>Hilly and Mountain relief</td>
</tr>
<tr>
<td>“Stryj Forestry” State Enterprise</td>
<td>35 190</td>
<td>Fagus Sylvatica, Quercus Robur</td>
<td>Plain and hilly terrain</td>
</tr>
<tr>
<td>“Turka Forestry” State Enterprise</td>
<td>18 723</td>
<td>Picea Abies, Abies Alba, Fagus Sylvatica</td>
<td>Mountain relief</td>
</tr>
<tr>
<td>“Skole Beskids” National Park</td>
<td>24 369</td>
<td>Picea Abies, Abies Alba, Fagus Sylvatica</td>
<td>Mountain relief</td>
</tr>
</tbody>
</table>
Other forestry enterprises and protected areas

«Galsillis» Regional Specialized Forest Enterprise

«Yavorivskyy» National Natural Park

«Roztochya» Natural Reserve
Thank you for your attention!