

BLENDED INTENSIVE PROGRAMME

Integrating Methodological Approaches in Nursing Research: Theoretical Foundations and Practical Applications



BLENDED INTENSIVE PROGRAMME (BIP)

**Integrating Methodological Approaches in Nursing
Research: Theoretical Foundations and Practical**

GENERAL INFORMATION

Host organisation and venue: **Faculty of Health sciences, Palacký University**

Palacký University Olomouc, founded in the 16th century, is the second-oldest university in Czechia and a leading centre of higher education and research. The historic city of Olomouc, often called the “Czech Oxford,” is home to more than 23,000 students and blends a rich cultural heritage with a vibrant academic environment. Its remarkable Old Town and strong student culture create an inspiring setting for study, research, and intercultural exchange.

The Faculty of Health Sciences is recognized nationally and internationally for high-quality education and research across the health professions. Study programmes integrate rigorous teaching, evidence-informed practice, and methodological innovation, with strengths spanning nursing, midwifery, physiotherapy, public health, radiography, and paramedic science. Emphasis is placed on critical thinking, clinical reasoning, patient safety, and ethical decision-making that translates research into practice.

Students engage in research projects focused on practice development, patient experience, and the quality and safety of care, collaborating with academic staff, clinical mentors, and partners at the University Hospital Olomouc and in community services. The faculty fosters interdisciplinary and international collaboration through Erasmus+ and other networks, supporting intercultural competence and the exchange of best practices. Reflecting global trends, digital health and the responsible use of artificial intelligence are increasingly embedded in education and research, equipping graduates across disciplines with the analytical, ethical, and technological skills required for contemporary health care.

Travelling to Olomouc — Quick Guide

Closest airports: Brno (80 km), Ostrava (80 km), Prague (270 km), Vienna (260 km), Bratislava (210 km), Katowice (210 km), Kraków (265 km).

Best routes to Olomouc:

- From Prague Airport:
 - Airport Express (AE) → Prague Main Station (~30 min), then train to Olomouc (~2.5 h).
 - Or Bus 119 → Nádraží Veleslavín (Metro A) → change at *Muzeum* to Line C → Main Station.
- From Brno Airport:
 - Bus 76 → Brno Main Station (~20 min), then train to Olomouc (~1.5 h).
- From Vienna Airport:
 - Train to Vienna Hauptbahnhof, then direct/connecting train to Olomouc (~3 h total).

By train: Fast, frequent, comfy. Operators: ČD (Czech Railways), RegioJet, Leo Express. Typical times: Prague ~2.5 h, Brno ~1.5 h, Ostrava ~1 h.

By bus: Often cheaper; good links from Prague, Brno, Vienna, Kraków (e.g., RegioJet, FlixBus).

By car: Prague ~3 h, Vienna ~2.5 h, Bratislava ~2 h. Motorway vignette (e-toll) required in Czechia.

Tip: Check timetables and buy tickets online (English available) for smoother transfers.

Accommodation

Participants may stay in dormitories within walking distance of the venue. We can arrange reservations on behalf, subject to availability. Please note that cancellations made less than 5 working days before arrival are subject to a penalty of 100% of the booking value.

Dormitories: *Generála Svobody* or *Neředín 2–4*

- Addresses: Šmeralova 1122/12, Olomouc (*Generála Svobody*) • třída Míru 644/13 (*Neředín*)
- Room setup: Double rooms; two neighboring rooms share one toilet and shower
- Price (per person/night):
 - *Generála Svobody*: 470 CZK in a double room; 690 CZK in a single room
 - *Neředín*: 590–1180 CZK, depending on room type
- Location: ~20 minutes on foot to the venue; nearest tram stop ~5 minutes away
- Contact: hotel@upol.cz • +420 585 638 016 • +420 777 000 202
- Website: <https://skm.upol.cz/en/>



BLENDED INTENSIVE PROGRAMME (BIP)

Integrating Methodological Approaches in Nursing Research: Theoretical Foundations and Practical Applications

Type of Participants

Eligible groups:

- Students (health-related fields with emphasis on nursing)
- Staff (academic teachers, clinical mentors/supervisors, research support/librarians, data/AI in health educators)

Disciplines (priority): Nursing; also welcome: other health-care professions.

Level of Study (Students)

- **Bachelor's (Bc.)** – preferably 2nd–3rd year; foundational knowledge of research methods recommended.
- **Master's (Mgr.)** – with prior exposure to evidence-based practice/research design; suitable for team leads in group work.
- **Doctoral (Ph.D.)** – focusing on methodological integration, mixed methods, or evidence synthesis; may mentor student teams.

Prerequisites (students):

- Basic course in research methodology (qualitative/quantitative) or equivalent experience
- **English B2** (min.) for active participation and presentations
- Personal **laptop/tablet** for database searches and AI-supported tasks

Staff Participation

- Lecturers/researchers in health sciences (methodology, EBP, qualitative/quantitative, mixed methods)
- Clinical educators/mentors
- Health sciences librarians/information specialists (search strategies, PRISMA)
- Digital health / AI educators (responsible AI, ethics, reproducibility)

Priorities Addressed

Inclusion & diversity. The programme welcomes students and staff from health-care disciplines (with priority of nursing) and cultural backgrounds. Activities are organized in mixed international teams, and learning materials are accessible to all participants.

Digital transformation. Participants learn to use digital research tools such as online databases and reference managers and explore responsible and transparent use of artificial intelligence in health research.

Environment & climate. The programme promotes sustainability through a combination of online and on-site learning, use of public transport, and paper-light materials. Environmentally friendly practices are encouraged during the stay.

Participation in democratic life. Discussions on research ethics, academic integrity, and responsible decision-making are part of the programme. Structured debates and daily feedback support active involvement of all participants.

Other. Emphasis is placed on evidence-based practice, intercultural teamwork, and clear scientific communication in English, helping participants connect research ideas and the principles apply responsibly in real clinical contexts.

Objectives and Description

The BIP Integrating Methodological Approaches in Nursing Research: Theoretical Foundations and Practical Applications is aimed to interconnect methodological approaches in health sciences by integrating quantitative, qualitative, and mixed-methods designs within an evidence-based practice. Participants will critically appraise literature, co-design potential designs of research, and apply ethical and responsible AI principles. Core to the programme is team collaboration: students and staff work in interdisciplinary, international teams with rotating roles (lead, methods, ethics, dissemination), peer feedback, and joint supervision to build transferable teamwork skills.

The BIP combines online preparation (intro to research design, search strategies, reporting standards) with an on-site intensive week at Palacký University Olomouc (interactive workshops, team projects, presentations). Structured team tasks cover literature searching/screening, tool-supported data handling, and transparent reporting.

Programme development & management: The Faculty of Health Sciences, Palacký University acts as coordinating institution (overall management, timetable, quality assurance). Partner universities co-develop content via co-teaching and assume defined work packages (e.g., quantitative methods, qualitative methods, mixed-methods integration, ethics/AI, evaluation). Organisation includes shared templates, checklists, and team charters to standardise collaboration.

Distribution of tasks & communication: Roles are agreed in advance; partners meet in regular online briefings, use a shared digital workspace, and maintain a single communication channel for scheduling and materials. Local and international participants not funded by Erasmus+ may join (space permitting) to broaden exchange and impact.

Main learning objectives:

- Understand the methodological foundations of research, with emphasis on their application in nursing and allied health disciplines.
- Search, evaluate, and retrieve scientific literature using advanced digital tools and evidence-based practices.
- Learn basic principles of quantitative, qualitative, or mixed-method research, demonstrating the ability to select and justify appropriate methodological approaches.
- Recognize and apply ethical principles in health-care research, including issues of data protection and participation consent.
- Utilize artificial intelligence and digital applications to support literature retrieval, data management, and analytical processes, while maintaining scientific and ethical integrity.
- Collaborate effectively within international and interdisciplinary teams, enhancing professional communication, research literacy, and evidence-based practice.

Methods and Outcomes

The programme uses interactive, team-based learning to connect theory with practice. Delivery combines short expert inputs, guided workshops, and small-group collaboration on projects built on potential shared research ideas. Participants work in international, interdisciplinary teams on structured tasks (literature searching, study design, basic data handling, transparent reporting) with peer feedback and joint supervision to strengthen collaboration and leadership skills.

A core aim is to interlink potential research themes across participating institutions already at the educational level, laying the groundwork for future cooperation.

The BIP blends an online preparation phase (research design, search strategies, reporting standards, digital tools) with an on-site intensive week at Palacký University Olomouc (hands-on workshops, team project development, presentations, ethical discussions). Shared digital material support coordination throughout.

Innovative elements: integration of digital tools for search, screening, and basic analysis; teamwork empowerment through shared ideas; and the combined use of quantitative, qualitative, and mixed-methods within an evidence-based practice.

Expected outcomes:

- Ability to search, appraise, and integrate evidence in health-care research;
- Critically assess quantitative, qualitative, and mixed-methods study designs;
- Enhanced teamwork, intercultural communication, and leadership;
- Practical understanding of ethics, data protection, and responsible AI;
- Proficient use of digital research tools and transparent reporting practices;
- Cross-institutional cooperation of research topics that continues beyond the BIP.

Start Date / End Date

On-site participation: *during April 2025*

Venue: Faculty of Health Sciences, Palacký University Olomouc, Czech Republic

Number of ECTS Credits Awarded

5 ECTS credits will be awarded to student participants upon successful completion of both the virtual and on-site components, including active participation in teamwork and presentation of outcomes.

Virtual Component Description

The virtual component will consist of one online introductory session held prior to the physical mobility. Its purpose is to familiarize participants with the programme structure, learning objectives, and expectations, and to provide an overview of the main methodological concepts that will be explored during the on-site week.

Students will be introduced to the principles of evidence-based practice, the basics of quantitative and qualitative research, and the use of digital tools for literature searching. The session will also include an orientation to Palacký University, programme, and team introductions to support early international collaboration and communication.

Virtual Component Duration

1 session (approx. 4 hours) - before on-site participation (*March 2025*)

Main Teaching/Training Language: English

City of the Venue: Olomouc

Country of the Venue: Czech Republic

Partnership Information

Name of the Institution: Palacký University Olomouc – Faculty of Health Sciences
OID:

Partnership Role: Coordinator

Mobility Activity Role: Receiving Institution

Schedule of the on-site participation

Sunday – Arrival and Orientation

Participants arrive in Olomouc and check in at the university dormitory. A welcome pack with the programme schedule, local map, and practical information will be provided. The day is kept free for rest, local exploration, and informal introductions among participants.

Monday – Welcome, Research Concepts, and Shared Focus

The programme begins with a formal welcome and introduction at the Faculty of Health Sciences. Participants are introduced to the objectives, structure, and team roles within the BIP. Each student presents their own research design (Task 1) to share disciplinary perspectives and establish common ground for collaboration.

Morning sessions focus on defining research interests, while afternoon lectures introduce database searching techniques (Task 2). Participants then form international teams and begin defining a shared research topic (Task 3) under the guidance of supervision. The evening concludes with country presentations and food tasting, promoting intercultural understanding and team bonding.

Tuesday – Evidence Retrieval, PRISMA, and Ethics

The day opens with a lecture on retrieval and selection of studies (Task 2) and continues with a session on ethical principles in research, emphasizing integrity, informed consent, and data protection.

In the afternoon, teams practice evidence retrieval using PRISMA methodology, working with digital tools to identify and screen relevant studies. Collaborative poster presentations allow for peer feedback and refinement of search and selection strategies. The focus of the day is on teamwork, transparency, and critical thinking in evidence-based practice.

Wednesday – Quantitative Design and Clinical Environment

The morning lecture introduces quantitative study designs (Task 3), exploring sampling, measurement tools, and validity in health research. The remainder of the day is devoted to a visit a hospital, where participants observe clinical research environments and discuss data collection processes, patient safety, and ethical considerations with health-care staff.

This day connects theoretical learning with real-world application, deepening participants' understanding of how research designs operate in clinical contexts.

Thursday – Qualitative and Mixed-Method Approaches

Thursday focuses on qualitative and mixed-method research designs (Task 3). Morning sessions explore qualitative methodologies such as interviews and focus groups, and discuss data trustworthiness, reflexivity, and analysis using thematic approaches.

The afternoon lecture introduces mixed-method design strategies, showing how quantitative and qualitative data can be integrated to enrich understanding. Teams then work on co-designing a joint research proposal, synthesizing elements of both paradigms into a coherent plan (Task 3).

Throughout the day, facilitators provide feedback and guidance, encouraging critical reflection and methodological integration across disciplines.

Friday – Artificial Intelligence, Final Presentations, and Evaluation

The final academic day begins with a lecture on artificial intelligence in health-care research, highlighting opportunities, ethical implications, and risks of bias in AI-assisted analysis. Teams thereafter present their joint research proposals, receiving feedback from academic staff and peers.

The afternoon is also devoted to programme evaluation and reflection, followed by the closing ceremony, where certificates and ECTS confirmations are awarded. The evening concludes with a farewell party, celebrating the international teamwork and shared achievements of the week.

Saturday – Departure

After breakfast, participants check out and depart. Departure assistance and documentation (attendance confirmation, travel support) are provided by the local coordination team.



TASKS' GUIDE

Task 1 – Presentation of Own Research Design and Country Introduction (Preparatory Phase)

Objective:

To introduce participants' individual research ideas and national academic perspectives, promote intercultural exchange, and identify thematic overlaps that will serve as a basis for collaborative team formation during the on-site component.

Focus areas:

- Short presentation of the participant's own research concept, academic focus, or professional area of interest in health sciences.
- Reflection on methodological approach (quantitative, qualitative, or mixed-method), study aim, and ethical considerations.
- Presentation of cultural and educational context relevant to nursing and health research in the home country.

Preparation (before arrival):

Participants should prepare two short presentations:

1. **Research Presentation** – a 5–7 minute talk (with 1–2 slides or a short abstract) outlining their research idea, including aim, design, population, and ethical aspects.
2. **Country Presentation** – a brief (3–5 minute) intercultural introduction of their home country or institution, highlighting aspects of health education, nursing or clinical practice, and academic culture.

To encourage cultural understanding, participants are invited to bring small samples of traditional local foods or snacks for a shared *Country Evening and Food Tasting* event. This informal activity strengthens intercultural communication, fosters group cohesion, and supports a collegial learning environment.

Recommended pre-reading and preparation:

- Review of basic research design typologies (quantitative, qualitative, mixed-method).
- Familiarization with the PICO framework for research question formulation.
- Reflection on the ethical and cultural dimensions of research and health care in their national context.

Outcome:

By the end of Task 1, participants will have:

- ✓ Shared their own research interests and cultural perspectives;
- ✓ Identified thematic intersections for team-based collaboration;
- ✓ Developed early intercultural awareness and rapport across partner institutions.

Task 2 – Evidence Retrieval and Critical Appraisal (On-site)

Objective:

To develop skills in systematic literature searching, selection, and critical appraisal of evidence using digital tools and transparent reporting frameworks (e.g., PRISMA).

Focus areas:

- Formulating search strategies and inclusion/exclusion criteria
- Database search and management of retrieved records
- Screening and documenting results using PRISMA methodology
- Discussing ethical aspects of data handling and transparency

Preparation (before arrival):

Participants are advised to review the basics of evidence-based practice (EBP/EBHC), especially the steps of evidence retrieval and hierarchy of evidence. Recommended preparatory reading: introductory materials on PRISMA flow diagrams, Boolean operators, and critical appraisal checklists (CASP, STROBE). Familiarity with common databases (e.g., PubMed, CINAHL, Scopus) and reference managers (e.g., PubMed) will be beneficial.

On-site activities:

Students work in interdisciplinary teams to conduct a literature search, screen studies, and produce a poster or presentation summarizing their search strategy, study selection, and critical insights.

Outcome:

A structured synthesis of evidence relevant to each team's selected topic, ready to inform the design of the joint research proposal.

Task 3 – Co-Design of an Interdisciplinary Research Proposal (On-site)

Objective:

To collaboratively design a small-scale research proposal integrating quantitative, qualitative, or mixed-method approaches, demonstrating methodological coherence, ethical awareness, and innovation.

Focus areas:

- Formulation of research aims and questions
- Selection and justification of methodology (quantitative, qualitative, or mixed-method)
- Ethical principles, consent, and data protection
- Integration of AI and digital tools in research processes
- Dissemination strategy and expected impact

Preparation (before arrival):

Participants may familiarize themselves with the principles of research ethics, mixed-methods frameworks, and reporting guidelines (e.g., STROBE, COREQ, CONSORT). Reviewing examples of research protocols in health sciences will provide useful context.

On-site activities:

Under academic supervision, teams develop a co-designed research proposal based on the shared topic defined earlier in the week. The final output includes a brief written summary and a PowerPoint presentation delivered at the closing session.

Outcome:

A collaborative interdisciplinary proposal that integrates methodological approaches, ethical reflection, and digital competencies — laying the foundation for potential future joint research across participating institutions.

Basic Schedule for easier orientation

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
7.30-8.30	Arrival	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	Departure	
8.30-9.00		Welcome & Introduction	Lecture: Retrieval of study selection (Task 2)	Lecture: Quantitative design (Task 3)	Lecture: Qualitative design (Task 3)	Lecture: Artificial intelligence in health-care research		
9.00-10.00		Presentation of own research design (Task 1)						
10.00-10.30		Coffee break	Coffee break		Coffee break	Coffee break		
10.30-12.00		Presentation of own research design (Task 1)	Lecture: Ethical principles		Lecture: Qualitative design (Task 3)	Collaborative teamwork – final co-design proposal (Task 3)		
12.00-13.00		Lunch	Lunch		Lunch	Lunch		
13.00-14.30		Lecture: Searching of databases (Task 2)	Collaborative teamwork – PRISMA (Task 2)		10.30-18.00 (approx.) Visit to hospital	Lecture: Mixed-method study designs (Task 3)		Group session 2 – co-design proposal (Task 3 Power Point Presentation & verbal feedback)
14.30-15.00		Coffee break	Coffee break		Coffee Break	Coffee Break		
15.00-16.30		Collaborative teamwork – defining a common research topic (Task 3)	Group session 1 – PRISMA selection of retrieval studies (Task 2 Poster Presentation & verbal feedback)	Collaborative teamwork – co-design proposal (Task 3)	Closing ceremony / Evaluation			
17.00-18.00		Preparation for country presentation						
18.00-19.00	(Task 1) Country presentations and food tasting from countrie	Own arrangements for dinner	Own arrangements for dinner	Own arrangements for dinner	Farewell party			
		Free time	Free time	Free time				

Pre-Departure Instructions for Participants

Blended Intensive Programme (BIP)

Integrating Methodological Approaches in Nursing Research: Theoretical Foundations and Practical Applications

Faculty of Health Sciences, Palacký University Olomouc – April

1. Virtual Introductory Session (March 2025)

Before the physical (on-site) mobility, participants will attend one online introductory session. The aim is to familiarize everyone with the BIP structure, objectives, and team organization, and to introduce the digital tools used during the programme (e.g., MS Teams, Moodle, or Zoom). You will receive a link and short technical guidance in advance.

2. Preparation for Task 1 – Individual Research and Country Presentations

Each participant is asked to prepare two brief presentations to be shared on the first day of the on-site programme:

(a) Research Presentation (5–7 minutes):

- Title and rationale of your research concept or study idea.
- Type of study design (quantitative, qualitative, or mixed-method).
- Target population and data collection plan.
- Ethical aspects (consent, data protection, inclusion).
- 1–2 PowerPoint slides (max.) summarizing your key points.

(b) Country Presentation (3–5 minutes):

- Brief overview of your country and university.
- Key features of health care education or nursing practice.
- One interesting fact or challenge related to research in your national context.

- Optional: Bring a small sample of traditional food or snacks from your country to share during the *Country Evening and Food Tasting*.

3. Pre-Reading and Recommended Preparation

To ensure a smooth start, please review the following before arrival:

- Basics of research methodology: quantitative, qualitative, and mixed-method approaches.
- Formulating research questions: PICO frameworks.
- Principles of Evidence-Based Practice (EBP).
- Introduction to PRISMA methodology for literature searching and screening.
- Ethical principles in health research and responsible use of AI tools.

Short introductory materials and links will be shared before the virtual session.

4. Practical and Technical Preparation

- Bring a personal laptop or tablet with internet access for workshops and group work.
- Install or update MS Teams/Zoom
- Ensure your English proficiency (B2 minimum) for active participation.
- Bring comfortable clothing for hospital visits and cultural activities.

** The organizer has the right to make changes to the program.*

5. Contact and Support

BIP Coordination Team – Faculty of Health Sciences, Palacký University Olomouc

 daniela.bartonickova@upol.cz; irena.jedlickova@upol.cz |  <https://www.fzv.upol.cz/en>

Administrative support and all technical instructions will be sent prior to the virtual meeting.



Blended Intensive Programme (BIP)

Integrating Methodological Approaches in Nursing Research: Theoretical Foundations and Practical Applications

International & interdisciplinary course on:

- Integrating quantitative, qualitative, and mixed-method approaches in health research
- Evidence-based practice and ethical research principles
- Responsible use of artificial intelligence in research design and analysis
- Intercultural and interdisciplinary teamwork in health sciences

Goals:

- Strengthen research literacy and methodological competence in nursing and allied health professions
- Foster interdisciplinary and international collaboration in health research
- Develop skills for critical appraisal, data management, and transparent reporting
- Promote ethical and responsible digital research practices

Practicalities:

- **5 ECTS (approx. 8 hrs/day + 86 hrs self-study)**
- **On-site week:** *April 2025*, Faculty of Health Sciences, Palacký University Olomouc, Czech Republic
- **Virtual component:** *March 2025* – short online introduction and orientation
- **Language:** English

Target group:

- Students (Bachelor, Master, PhD) in Nursing and other health-related disciplines
- Academic staff, clinical mentors, research and data educators

Participation criteria:

- Minimum English level B2
- Basic knowledge of research methodology
- Motivation for interdisciplinary and international teamwork

Evaluation:

- Participation in online and on-site components
- Completion of group research proposal and presentation

Contact:

Faculty of Health Sciences, Palacký University Olomouc

 daniela.bartonickova@upol.cz; irena.jedlickova@upol.cz

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