Teaching with AI: Ethical and Responsible Integration in Higher Education

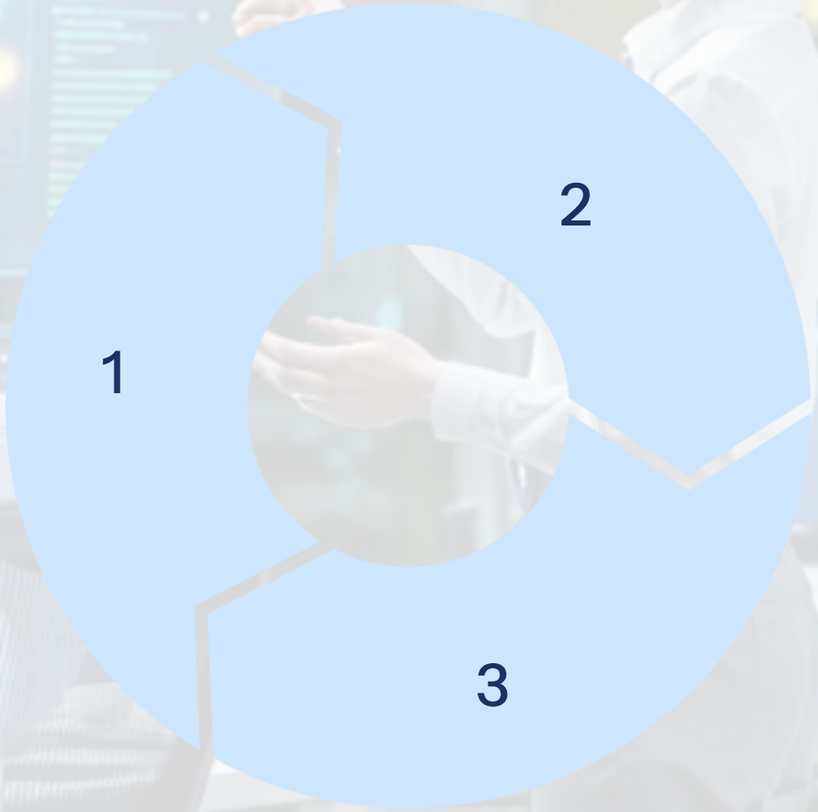
Welcome to our presentation on integrating AI in higher education. We'll explore how to teach with AI ethically and responsibly.

Presented by **Mohamed Ali Hafez and Amardeep Dhanju**

Why AI in Higher Education?

Future of Work

AI is reshaping industries. Students need exposure to stay competitive in tomorrow's job market.



AI Literacy

Tomorrow's leaders must understand AI capabilities and limitations to guide responsible implementation.

Classroom Innovation

AI offers unprecedented teaching opportunities while raising important ethical questions to explore.

The Pedagogical Challenge

Over-reliance Risk

Students may substitute critical thinking with AI-generated solutions.

Academic Integrity

Maintaining honest assessment becomes more complex with AI tools.

Equity Concerns

Access disparities may widen educational gaps if not addressed thoughtfully.

The Pedagogical Challenge (contd)

Integrating AI in higher education also presents several ongoing challenges:

Rapid Evolution

AI's fast-paced development requires constant curriculum updates through research presentations and news sharing.

Interdisciplinary Complexity

Effective teaching demands integrating AI ethics, law, policy, and technical aspects.

Broader Implications

Environmental footprint (energy/water consumption) and societal impacts require dedicated curriculum coverage.

Balanced Approach

Students need both technical understanding and critical perspectives on AI's real-world consequences.

Course Case Study – AI, Renewable Energy & Climate Change

Interdisciplinary Approach

Blending technology, ethics, and environmental studies creates holistic understanding.

Inclusive Design

Course materials accommodate various technical backgrounds for broader participation.

Real-world Applications

Students apply AI to climate challenges, making abstract concepts concrete.

What We Teach About AI

AI Fundamentals

Core concepts and mechanisms behind modern AI systems

Practical Applications

Hands-on experience with language models and analytics tools

Ethical Frameworks

Bias recognition, fairness principles, algorithmic accountability

Critical Evaluation

How to critically assess AI outputs (trust but verify)

Societal Impacts

Broader effects of AI on employment, climate policy, and social equity

AI Policy Awareness

Introduction to current global regulations and ethical standards (e.g., EU AI Act, U.S. Executive Orders)

Student Engagement & Impact

Open-Source Experimentation

Students used Open-Source AI tools, developing practical skills.

Ethics Debates

Structured discussions explore AI dilemmas, building critical thinking abilities.

Technical Empowerment

Students gain "makers knowledge" by building local language models, using open source tools, harnessing AI capabilities for their specific use cases.

Team Presentations

Groups present their unique AI applications, enhancing communication and collaboration skills.

Key Takeaways for Educators

Reframe AI's Role

Present AI as an enhancing tool rather than a replacement for human thought.

Emphasize augmentation over automation in teaching materials.

Design Ethical Activities

Create assignments that examine AI's societal implications alongside technical skills.

Balance theoretical knowledge with practical application.

Foster Cross-Disciplinary Collaboration

Partner with colleagues across departments to explore AI from multiple perspectives.

Break down silos between technical and humanities education.

Open Discussion

Current Usage

How is AI currently being used in your classrooms?

Opportunities

What new possibilities do you see for AI in your teaching?

Concerns

What challenges worry you about AI integration?

Collaboration

How might we work across departments to address these issues?

Thank You & Connect

IRC Support Team

To La Tonya Dyer and the IRC Team—

Elba Sepulveda, Pam Stefanuca, and Kris Mueck

Course Development Partners

Special thanks to Dan Zachary and Lama Elhatow for their pivotal role in bringing this course to life.

Future Collaboration

Let's continue building future-ready, ethical learning environments together. We look forward to our ongoing collaboration!

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