DecentraClass: A Web3 Educational Framework Powered by Xandeum

1. Overview

DecentraClass is a visionary decentralized learning management system (LMS) built on the Xandeum storage layer. It enables students and teachers to create, store, and exchange educational content—lessons, assignments, grades, credentials—entirely on-chain.

In contrast to traditional platforms like Google Classroom or Canvas, DecentraClass ensures ownership, portability, and permanence of academic data through a secure, scalable read/write infrastructure that is Only Possible on Xandeum.

2. The Problem

Education today is locked behind centralized, siloed platforms that:
- Restrict access to student records after graduation
- Prevent cross-platform credential sharing
- Place content ownership in the hands of tech providers
- Are vulnerable to de-platforming, censorship, or data loss

Students and teachers are users—not owners—of their educational history.

3. The Solution: DecentraClass

Key Features:
- Wallet-based identity: All activity tied to user wallets
- Course hosting: Multimedia lessons editable and versioned via Xandeum
- Assignments: Student submissions uploaded and timestamped immutably
- Grading: Feedback and evaluation records stored transparently
- Credentials: Diplomas and badges minted as NFTs or linked attestations
- Access control: Public and private courses with cryptographic permissions

4. Why Xandeum

DecentraClass cannot be built on static archival solutions. It requires:
- Real-time editable storage (e.g., lesson updates)
- Mutable recordkeeping with version history
- High availability + low latency
- On-chain permanence + auditability

Xandeum's decentralized read/write architecture uniquely supports all of this.

5. Use Cases & Impact

- Students: A lifelong academic record, owned by them
- Teachers: Own and monetize course content directly
- DAOs/Bootcamps: Run educational tracks with reputation-based grading
- Employers/Institutions: Instantly verify records and achievements

Example: A student's 8th-grade science project and their DAO coding certificate are permanently linked to their Web3 identity.

6. MVP Roadmap

Phase 1:
- UI: Course creation, assignment uploads
- Grading dashboard
- Wallet-based login

Phase 2:
- Credential NFTs
- Course marketplace
- Reputation score layer

Phase 3:
- DAO-integrated learning systems
- Open protocol for other dApps to build on

7. Visuals & Supporting Materials

- Carousel pitch thread
- Wireframes (Teacher Dashboard, Student Portal)
- Flowchart: Create → Submit → Grade → Certify
- MVP GitHub Repo (in progress)

8. Vision

DecentraClass aims to be the foundation of a new academic architecture. One that is open, censorship-resistant, borderless, and fully owned by the people who create and use it.

Just like Xandeum is to storage, DecentraClass is to education: a new standard of trust, freedom, and permanence.