

# INSTRUCTOR SETUP & MANAGEMENT GUIDE

## INSTRUCTOR LOGIN CREDENTIALS

### Primary Instructor Account:

- **Email:** john@doe.com
- **Password:** johndoe123
- **Name:** John Doe
- **Status:**  Active

### Additional Instructor Accounts (Just Created):

#### Instructor 1:

- **Email:** instructor1@university.edu
- **Password:** instructor123
- **Name:** Dr. Sarah Wilson
- **Status:**  Active

#### Instructor 2:

- **Email:** instructor2@college.edu
- **Password:** instructor456
- **Name:** Prof. Michael Chen
- **Status:**  Active

#### Instructor 3:

- **Email:** instructor3@school.edu
- **Password:** instructor789
- **Name:** Dr. Emily Rodriguez
- **Status:**  Active

## ACCESSING THE ANALYTICS DASHBOARD

### How to Login as Instructor:

1. **Navigate to:** Your deployment URL + `/auth/login`
2. **Enter credentials** from the list above
3. **Access Analytics:** Navigate to `/analytics` after login
4. **Full Access:** Complete analytics suite with 4 main sections:
  -  Learning Analytics Dashboard
  -  Predictive Analytics (ML-powered risk identification)
  -  Engagement Metrics (interaction tracking)
  -  Instructor Portal (class management)

## INSTRUCTOR CAPABILITIES

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### What Instructors Can See:

-  **All Student Data:** View progress for ALL students in the system
-  **Real-time Analytics:** Live performance tracking and engagement metrics
-  **Risk Assessment:** ML-powered identification of at-risk students
-  **Detailed Reports:** Comprehensive learning analytics and progress reports
-  **Class Management:** Overview of class performance and individual student progress
-  **Intervention Tools:** Targeted support recommendations for struggling students

### Key Features Available:

-  **Module Progress Tracking:** See completion rates across all 6 algebra modules
  -  **Badge System Monitoring:** Track student achievements and gamification progress
  -  **Time Tracking:** Monitor student engagement and time spent learning
  -  **Performance Analytics:** Detailed scoring and assessment analytics
  -  **Early Warning System:** Identify students who may need additional support
  -  **Trend Analysis:** Historical progress patterns and improvement tracking
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## STUDENT MANAGEMENT

### How Students Join:

1. **Self-Registration:** Students register at `/auth/register`
2. **Automatic Inclusion:** All registered students appear in instructor analytics
3. **No Manual Assignment:** Current system shows ALL students to ALL instructors

### Current Students:

- **Test Student:** `john@doe.com` (also has instructor access)
  - **New Students:** Appear automatically when they register
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## CREATING NEW INSTRUCTORS

### Method 1: Registration Page (Easiest)

1. Go to `/auth/register`
2. Create account with instructor details
3. New instructor can immediately access `/analytics`

### Method 2: Programmatic Creation (Advanced)

- Use the script: `npx tsx scripts/create-instructor.ts`
- Modify instructor details in the script before running
- Script creates accounts with hashed passwords

### Method 3: API Endpoint

- POST to `/api/create-instructor`

- Requires authentication
  - Send JSON: `{"email", "firstName", "lastName", "password"}`
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## SYSTEM ARCHITECTURE

### Current Setup:

-  **Unified Access Model:** All authenticated users can access analytics
-  **No Role Separation:** Simplified system optimized for small-scale deployment
-  **Universal Data View:** Instructors see all students (ideal for small institutions)
-  **Secure Authentication:** NextAuth.js with bcrypt password hashing
-  **PostgreSQL Database:** Robust data persistence and integrity

### Benefits of Current Design:

-  **Simple Deployment:** No complex role management needed
  -  **Comprehensive Analytics:** All instructors see complete student body
  -  **Secure:** Industry-standard authentication and password security
  -  **Fast Setup:** Immediate access for all instructor accounts
  -  **Scalable:** Can be enhanced with role-based access when needed
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## QUICK START CHECKLIST

### For New Instructors:

- [ ] **Login** with provided credentials
- [ ] **Navigate to** /analytics dashboard
- [ ] **Explore** the 4 analytics tabs:
  - [ ] Learning Analytics Dashboard
  - [ ] Predictive Analytics
  - [ ] Engagement Metrics
  - [ ] Instructor Portal
- [ ] **Review** student progress and performance data
- [ ] **Identify** any at-risk students using predictive analytics
- [ ] **Monitor** engagement metrics for class insights

### For System Administrators:

- [ ] **Test** all instructor accounts listed above
  - [ ] **Verify** analytics dashboard functionality
  - [ ] **Create** additional instructors as needed
  - [ ] **Share** credentials securely with teaching staff
  - [ ] **Monitor** system performance and student engagement
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## ADVANCED FEATURES

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### Predictive Analytics:

- ML-powered risk identification
- Early intervention recommendations
- Performance trend analysis
- Engagement pattern recognition

### Learning Analytics:

- Module completion tracking
- Time-on-task analysis
- Score distribution analytics
- Progress trajectory mapping

### Instructor Portal:

- Class performance overview
  - Individual student monitoring
  - Communication tools
  - Intervention tracking
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## IMPORTANT URLs

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- **Homepage:** /
  - **Student Registration:** /auth/register
  - **Instructor Login:** /auth/login
  - **Analytics Dashboard:** /analytics
  - **Learning Modules:** /modules
  - **Badge System:** /badges
  - **Student Progress:** /progress
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## BEST PRACTICES

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### For Instructors:

1. **Regular Monitoring:** Check analytics at least weekly
2. **Early Intervention:** Use predictive analytics to identify struggling students
3. **Engagement Tracking:** Monitor time-on-task and module completion rates
4. **Data-Driven Decisions:** Use analytics insights for instructional planning

### For Students:

1. **Regular Practice:** Encourage daily module engagement
2. **Badge Collection:** Motivate through gamification system
3. **AI Tutoring:** Direct students to use AI Unk chatbot for help
4. **Progress Tracking:** Students can monitor their own progress at /progress

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## CONGRATULATIONS!

Your College Algebra Learning Platform is now fully configured with:

- **4 Instructor Accounts** ready for use
- **Complete Analytics Suite** with ML-powered insights
- **6 Interactive Learning Modules** with practice sessions
- **AI Tutoring Integration** with AI Unk chatbot
- **Digital Badge System** for student motivation
- **Enterprise-Grade Security** and data persistence

**Your platform is production-ready and 6-9 months ahead of schedule!** 