

## **Title**

Differentiated Instruction for Middle School Students

## **Target Audience**

This course is intended for pre-service and in-service middle school teachers.

## **Prerequisites**

To successfully participate and complete the assignments in this course, the learner must have experience:

- Browsing the Internet
- Navigating a computer environment using a mouse
- Using a word-processing program to compose their writing
- Designing, delivering, and assessing middle school students in a content area.
- Organizing and managing a classroom
- Be familiar with taking an online course or have completed the PBS “Practice Learning Online with TeacherLine” course.

## **Course Description**

Differentiation enables teachers to adjust the components of instruction — content, activities, and assessment — to students’ varied cognitive readiness levels, interests, and learning profiles in order to help all students learn. Over the next 6 weeks, you will be developing parts of a differentiated instructional middle school unit related to a set of related educational standards mandated by your local school district.

## **Instructor/Facilitator**

See instructor/facilitator sheet

## **Credits**

To be determined by college or university

## **Goals**

The overall goal of this course is for learners to develop an understanding of how to differentiate content, activities, and assessment to meet the needs of all learners in your middle school classroom.

By the end of the course, the learner will understand and be able to apply the following in their own classroom:

- The unique characteristics of middle schools
- How to pre-assess students to determine their cognitive readiness levels, interests, and learning styles
- How to differentiate resources, activities, and assessments by student cognitive readiness levels, interests, and learning styles

### Outline of Content and Assignments

After previewing the documents in the Course Information area, learners will proceed to Course Content to complete the following six sessions, working through each session in order. Throughout the sessions, learners are asked to articulate their ideas in various forms: they are encouraged to reflect on their ideas and experiences in their online journal; the discussions in the discussion forum are designed to allow learners to glean information from other learners' experiences. Learners will develop parts of a differentiated middle school unit as they progress through the course.

This course is designed to address ISTE's *Educational Technology Standards and Performance Indicators for All Teachers*. These standards define the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings.

This course specifically addresses the following ISTE NETS\*T:

#### I. Technology Operations and Concepts

Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:

- Demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Education
- Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

#### II. Planning and Designing Learning Environments and Experiences

Teachers plan and design effective learning environments and experiences supported by technology.

Teachers:

- Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- Apply current research on teaching and learning with technology when planning learning environments and experiences.
- Identify and locate technology resources and evaluate them for accuracy and suitability

#### III. Teaching, Learning, and the Curriculum

Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:

- Use technology to support learner-centered strategies that address the diverse needs of students.

#### V. Productivity and Professional Practice

Teachers use technology to enhance their productivity and professional practice. Teachers:

- Use technology resources to engage in ongoing professional development and lifelong learning.
- Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
- use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

Visit [cnets.iste.org](http://cnets.iste.org) for a full list of the ISTE's *Educational Technology Standards and Performance Indicators for All Teachers* and more information about these standards.

**Session 1: Setting Goals For Middle School Learning**

Since this course targets middle school students, we will first explore some theories of adolescent development and consider how they apply to individual students. We will look at how to develop learning goals that reflect various cognitive levels, and take a brief look at how you might factor in students' interests and learning styles. Finally, you will select a set of related content standards in your discipline and determine what you want all students to know, understand, and do to achieve the standards.

Learners will:

Read

- “Conclusion” from Academic Diversity in the Middle School: Results of a National Survey of Middle School Administrators and Teachers
- “Characteristics of a Young Adolescent”
- California State Department of Education study excerpt
- “What Is the Theory of Multiple Intelligences?”
- “Jung’s Theory of Personality Type”

Write in online journal

- Your two students and their learning styles
- Expectations
- Prior Knowledge

Participate in an online discussion

- Get to Know Each Other
- To what extent do the findings of the National Research Center of the Gifted and Talented study reflect your own thinking and practice?

Complete activities and assignments

- Unit Planning Guide
- Bloom’s Taxonomy Game
- Student Characteristics Table

**Session 2: Cognitive Readiness: Beginning Where The Students Are**

Finding out what students already know, understand, and can do allows you to group students at similar levels of cognitive readiness, and to adjust content, activities, and assessment for groups on the basis of data. In this session you will develop a formal pre-assessment strategy for the unit objectives you identified in Session 1.

Learners will:

Read

- “All Kids Can Learn — Masking Diversity in the Middle School”

View video

- Pre-assessment Video

Write in online journal

- Pre-assessments, current practice

Participate in an online discussion

- Interpreting the Data

Complete activities and assignments

Objectives/Content Chart  
Pre-assessment

**Session 3: Content Delivery: Selecting Differentiated Resources**

This session focuses on content delivery: how do you select differentiated resources on the basis of cognitive-readiness levels, learning profiles, and student interest? You will be locating, evaluating, and selecting content resources for the unit you are developing.

Learners will:

Read one of  
"Differentiating Content"  
"Manipulatives: The Right Touch"  
"Tiered by Resources"  
"Comparisons From the Middle Grades"  
"Scenario for a Differentiated Classroom"

View Video  
Content Example

Write in online journal  
Current Practice

Participate in an online discussion  
Content

Complete activities and assignments  
One of three online assistive technology tutorials  
Find differentiated content for a unit

**Session 4: Tiering Activities**

This session focuses on activities that help students expand their understanding of the content. Building on the three prior units, we introduce tiered activities, in which groups of students work simultaneously on the same learning objectives, but do so through instructional activities geared to each group's particular level of cognitive readiness. To complete this unit, you will select a lesson and develop a series of tiered activities for its particular goals.

Learners will:

Read  
"Six Ways to Structure Tiered Activities"  
"Maps—A Tiered Assignment"  
"Making Tiering Invisible"

View Video  
Two tiered activity videos

Write in online journal  
Tiered Activities

Participate in an online discussion  
Tiered Activities

Complete activities and assignments  
Design a tiered activity for a unit  
Activity Sort Game

**Session 5: Assessment**

The focus of this session is assessment - how to differentiate assessments to address students' diverse cognitive readiness levels. Summative or culminating assessments are given at the end of a unit and measure what students now know, understand, and can do as a result of instruction. Working with the same unit you have been developing throughout the course, you will create differentiated unit assessment.

Learners will:

Read  
"Culminating Assessments"  
"Sample Differentiated Product Assignment"

Write in online journal  
Current assessment practice  
Differentiated Product Assignment

Participate in an online discussion  
Simple or complex problems

Complete activities and assignments  
Design a differentiated assessment for a unit

**Session 6: Putting It All Together**

In the past five sessions, you learned both theoretical and practical information about differentiating instruction in middle school. You explored many ways to differentiate instruction, materials, activities, and assessments to meet the different cognitive readiness levels, learning styles, and interests of your students. This final session will provide you with the opportunity to pull together all the concepts you have learned during the course.

Learners will:

Participate in an online discussion  
Is Differentiation Fair?

Complete activities and assignments  
Final Project  
Course Post Evaluation Survey

Write in online journal  
Reflect on acquired knowledge.  
Reflect on professional goals.

**Schedule**

This course is scheduled to take approximately 30 hours to complete readings, activities, video, assignments, reflections and a final project.

## **Requirements**

Learners are expected to:

- Complete all assignments.
- Maintain an online journal.
- Participate and actively engage in discussions with fellow learners while contributing to the social construction of knowledge.
- Be self-directed and self-motivated.
- Ask for assistance when they need it.

## **Materials (hardware, software, plug-ins)**

- Technical Requirements
- Word processor
- Internet service provider
- E-mail

## **Evaluation**

This course is evaluated on a letter grade basis, and may be available for graduate credit. See graduate credit details pertaining to specific graduate credit institutions.

## **Academic Dishonesty Policy**

To be inserted by university institution only

**Last Revision December 5, 2005**