

1. **Teaching Chapter:** Biodiversity
2. **Teaching Content:** Introduce the meaning and value of biodiversity, discuss the threats faced by biodiversity, and protection measures.
3. **Teaching Hours:** 2 hours
4. **Target Audience:** Middle school biology students
5. **Teaching Content Analysis:** This lesson mainly introduces the concept and content of biodiversity, guides students to understand the importance of biodiversity to humans, and learn about the threats and protection measures of biodiversity.
6. **Student Analysis:** Students have some understanding of the concept of biodiversity, but may not have a deep understanding of its value and protection measures, and may need teaching guidance and case analysis to understand.
7. **Teaching Objectives:**
 - Understand the concept and content of biodiversity.
 - Provide examples illustrating the value of biodiversity.
 - Understand the importance of protecting biodiversity.
8. **Teaching Focus:**
 - Concept and content of biodiversity.
 - Value of biodiversity and examples.
 - Importance of protecting biodiversity.
 - Focus 1: Concept and content of biodiversity.
 - Analyze: Explain the definition and content covered by biodiversity to help students understand the concept of biodiversity.
 - Focus 2: Value of biodiversity and examples.
 - Analyze: Use examples to illustrate the direct, indirect, and potential values of biodiversity to human beings, helping students realize the importance of biodiversity.
 - Focus 3: Importance of protecting biodiversity.
 - Analyze: Explain the threats faced by biodiversity and measures for protecting biodiversity to help students understand the importance of protecting biodiversity.
 - Teaching Strategies: Concept explanation, case analysis, interactive discussion.
9. **Teaching Challenges:**
 - Understand the content of biodiversity.
 - Indirect and potential meanings of the value of biodiversity.
 - Understanding the importance of protecting biodiversity.
 - Challenge 1: Understanding the content of biodiversity.
 - Analysis: Biodiversity includes species diversity, genetic diversity, and ecosystem diversity. Students need to understand these different aspects.
 - Challenge 2: Understanding the indirect and potential meanings of the value of biodiversity.
 - Analysis: Students may only understand the direct value of biodiversity, and need guidance through cases and discussions to think about the indirect and potential meanings of biodiversity.
 - Challenge 3: Understanding the importance of protecting biodiversity.
 - Analysis: Students need to recognize the importance of protecting biodiversity for human production and life.
 - Teaching Strategies: Heuristic teaching, case analysis, group discussion.
10. **Teaching Philosophy and Design Concepts:** Spark student thinking through vivid examples, help students understand the content and value of biodiversity from different perspectives, and realize the importance of protecting biodiversity.
11. **Teaching Organization:** Overall teaching.
12. **Teaching Methods:** Multimedia courseware, images, case analysis, group discussion.
13. **Teaching Steps**
 - a. Introduction:
 - Content: Tell interesting stories about biodiversity.
 - Process and Method: Introduce the importance of biodiversity and the diversity of meanings.
 - Time: 5 minutes
 - b. Review:
 - Content: Review the knowledge points learned in the previous class
 1. What is biodiversity? (Richness of biological species)
 2. What aspects does biodiversity include? (Species diversity, ecosystem diversity, genetic diversity)
 3. What is the significance of biodiversity to humans? (Direct value, indirect value, potential value)
 - Process and Method: Classroom questioning
 - Time: 10 minutes
 - c. Introduce new knowledge:
 - Content: Introduce the knowledge points to be taught in this class
 1. Threats to biodiversity and their reasons
 2. Importance of protecting biodiversity
 3. Measures to protect biodiversity
 - Process and Method: Explanation + classroom discussion
 - Time: 20 minutes
 - d. Summary:
 - Content: Summarize the main content of this class based on the learning objectives.
 - Process and Method: Summary
 - Time: 5 minutes
14. **Assignment Design:**
 1. Design a poster to introduce the concept and content of biodiversity with images and text.
 2. Choose a specific species or ecosystem, understand its role in the ecosystem, the importance of protecting this species or ecosystem, and write a report to share with classmates.
 3. Group discussion: Think about and propose specific protection measures against the threats to biodiversity, and submit a summary.
15. **Assessment method:** Grading of written assignments.