Create a lesson plan for 3rd year university biology course on plant systematics.

I. Introduction
A. In this lesson, we will be learning about plant systematics, or the study of classifying and organizing plants into hierarchical categories based on their similarities and differences.

B. We will discuss the history of plant systematics, the nomenclature system used to name plants, as well as current methods used to classify and study plant systematics.

C. We will cover the importance of plant systematics in terms of its implications for conservation biology and the analysis of evolutionary relationships between species.

II. The History of Plant Systematics
A. We will begin by discussing the history of plant systematics, from its origins in Greek and Roman philosophy through its development in modern botany.

B. We will then discuss the work of notable scientists from the 16th century to the present, such as Linnaeus and Humboldt, who have contributed to the development of plant systematics.

III. Plant Nomenclature
A. We will then review the International Code of Botanical Nomenclature, which is the official code used to name plants.

B. We will discuss the main categories of the nomenclature system, including the genus, species and subspecies.

C. We will also discuss the importance of common and scientific names.

IV. Current Methods of Plant Systematics
A. We will then discuss the current methods used in plant systematics, including morphological and molecular techniques.

B. We will then review the advantages and disadvantages of each method, including the use of morphological characters versus DNA sequences.

V. Implications for Conservation Biology and Evolutionary Relationships
A. We will then discuss the implications of plant systematics for conservation biology, such as how it can be used to identify and protect endangered and threatened species.

B. We will also discuss how plant systematics can help us better understand evolutionary relationships between species, by allowing us to infer common ancestor populations and identify patterns of speciation.

VI. Conclusion
A. In conclusion, we have discussed the history of plant systematics and the current methods used to classify and study plants.

B. We have also discussed the implications of plant systematics for conservation biology and evolutionary relationships between species.

C. Finally, we have identified some important scientists and works that have contributed to the development of plant systematics.

D. Thank you for your attention. I hope that you have learned a lot in this lesson.

E. Are there any questions before we move on to our next lesson?