**Abstract:** In this thesis we study certain geometric properties of Müntz spaces as subspaces of continuous functions. In the first chapter we present some of the most important examples of the Müntz type theorems. Namely, we present the classic Müntz theorem and the Full Müntz theorem in the setting of the space of continuous functions on the interval $[0, 1]$. We also mention several extensions of these theorems to the case of continuous functions on the general interval $[a, b]$ as well as an analogy of the Full Müntz theorem for the $L^p([0, 1])$ spaces. The second chapter is divided into three sections. In the first section we present some definitions and well-known theorems of Choquet theory, which we use to characterize the Choquet boundary of Müntz spaces. In the second section we present the result concerning non-reflexivity of Müntz spaces as well as its corollary describing the non-existence of an equivalent uniformly convex norm on these spaces. In the third section, we concern ourselves with the question of Müntz spaces having the Radon-Nikodym property. As a main result of this part we show that a certain type of Müntz spaces doesn’t have the Radon-Nikodym property. The final chapter contains a summary of some known results as well as open problems related to the theory of Müntz spaces.

**Keywords:** Müntz spaces, Choquet boundary, Radon-Nikodym property, reflexivity