Students who are inexperienced with multi-user virtual environments (MUVEs) such as Second Life can experience significant difficulties when first entering the virtual classroom. The unfamiliar paradigm of moving an avatar around a simulated Euclidean space can lead to disorientation, confusion, frustration and ultimately, a defeatist affect that leads to abandonment of the format. Overcoming these barriers-to-entry necessitates a foundational training course in which students can become efficacious in the basic use of virtual worlds. However, researchers have not fully established evidence-based best practices for the design of these training courses. Gamification, the process in which non-game activities are endowed with the typical attributes of a game, is a technique that has been empirically shown to improve motivation and satisfaction in such fields as education and the workplace. This study experimentally tested the effects of gamifying a virtual world familiarization course on self-efficacy, persistence, task skill and satisfaction. The results inform a theoretical model and substantive recommendations for the design of familiarization courses for virtual world learning programs.