**Principles of Learning**

1. Students’ prior knowledge can help or hinder learning.

1. How students organize knowledge influences how they learn and apply what they know.

1. Students’ motivation determines, directs, and sustains what they do to learn.

1. To develop mastery, students must acquire component skills, practice integrating them, and know when to apply what they have learned.

1. Goal-directed practice coupled with targeted feedback enhances the quality of students’ learning.

1. Students’ current level of development interacts with the social, emotional, and intellectual climate of the course to impact learning.

1. To become self-directed learners, students must learn to monitor and adjust their approaches to learning.

**Teaching Principles**

1. Effective teaching involves acquiring relevant knowledge about students and using that knowledge to inform our course design and classroom teaching.

1. Effective teaching involves aligning the three major components of instruction: learning objectives, assessments, and instructional activities.

1. Effective teaching involves articulating explicit expectations regarding learning objectives and policies.

1. Effective teaching involves prioritizing the knowledge and skills we choose to focus on. Don’t try to do too much in a single course.

1. Effective teaching involves recognizing and overcoming our expert blind spots.

1. Effective teaching involves adopting appropriate teaching roles to support our learning goals (e.g., synthesizer, moderator, challenger, commentator).

1. Effective teaching involves progressively refining our courses based on reflection and feedback (e.g., something is not working, we want to try something new, the student population has changed, or there are emerging issues in our fields).