An aerial photograph of a city and a golf course at sunset. The sun is low on the horizon, casting a warm glow over the scene. The city skyline is visible in the background, with various buildings and structures. In the foreground, there is a large green golf course with several holes and a winding path. A road with a roundabout is visible in the lower center of the image. The overall atmosphere is peaceful and scenic.

Unit 2

Competitive Markets and Efficiency (Chs. 2 & 3)

10/21

ECON 323 – MICROECONOMIC THEORY – DR. STRICKLAND

Introduction



We will examine:

- **Supply curves** (chapter 2)
 - Determinants of supply
 - Supply curves vs. inverse supply curves
 - Elasticity
- **Competitive market equilibrium** (chapter 2)
- **Efficiency of competitive markets** (chapter 3)

Supply



Supply: the firm's decision to produce a good/service

What matters for supply?

1. Price **LAW OF SUPPLY:** $\uparrow P \Rightarrow \uparrow Q_s$, $\downarrow P \Rightarrow \downarrow Q_s$
2. Costs of production
3. Producers' outside options
4. Number of producers

Supply Curves

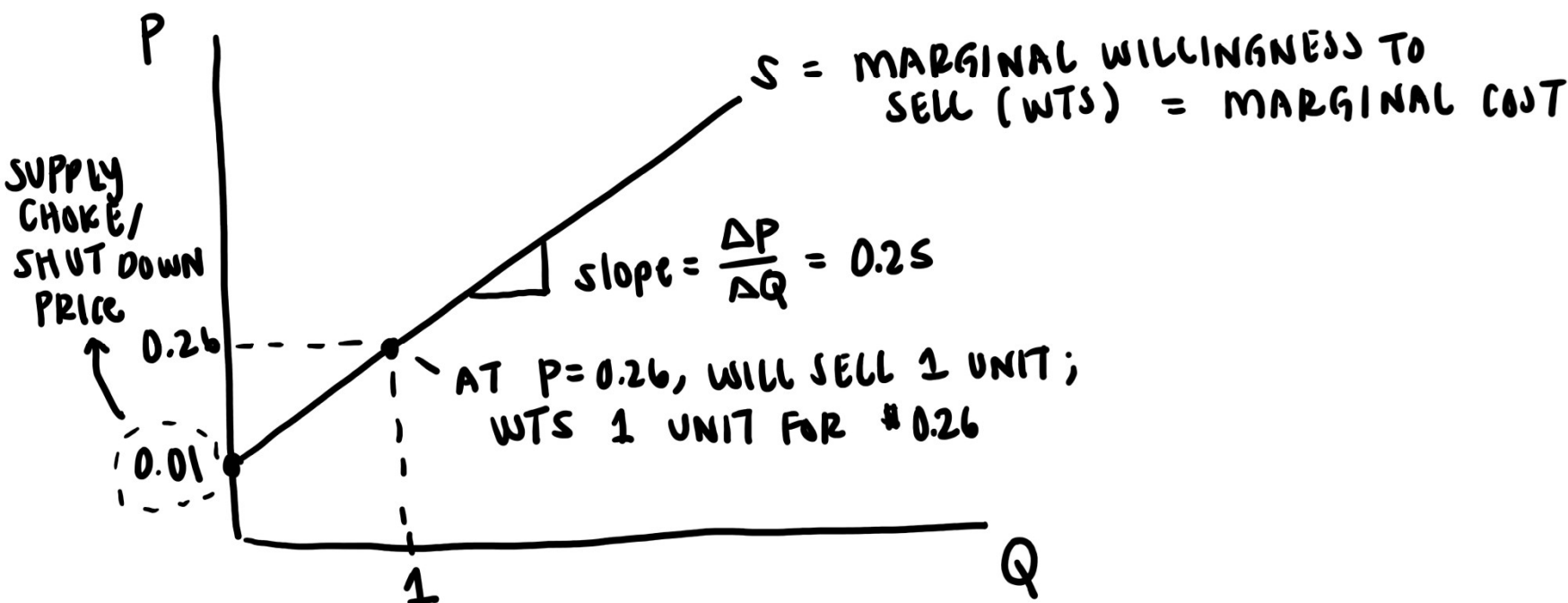


A **supply curve** isolates the effect of **price** on **quantity supplied**

- Economists plot the **inverse supply curve**

SUPPLY CURVE: $Q_s = f(P)$ e.g. $Q_s = 200P + 50$

INVERSE SUPPLY: $P = f(Q_s)$ e.g. $P = 0.01 + 0.25Q_s$ * WHAT WE GRAPH



Price Elasticity of Supply



Price elasticity of supply: the percentage change in quantity supplied divided by the percentage change in price

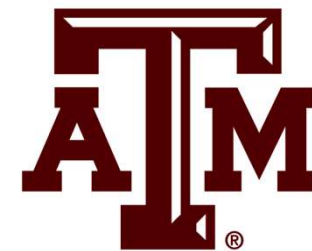
$$\epsilon_s = \frac{\underbrace{\% \Delta Q_s}_{\substack{\text{new-old} \\ \text{old}}}}{\% \Delta P} = \frac{\Delta Q_s / Q_s}{\Delta P / P} = \left[\frac{\Delta Q_s}{\Delta P} \cdot \frac{P}{Q_s - \text{old}} \right]$$

* ELASTICITY
BTWN 2
PRICES

$$\epsilon_s = \left[\frac{1}{\underbrace{\text{SLOPE}}_{\substack{\text{OF INVERSE} \\ \text{SUPPLY}}}} \cdot \frac{P}{Q_s} \right]$$

* ELASTICITY
AT A PRICE

Characterizing Price Elasticity of Supply



When price elasticity of supply is high...

- **Elastic** $| \epsilon_s | > 1$
- Infinitely high? **Perfectly elastic** $| \epsilon_s | = \infty$

When price elasticity of supply is low...

- **Inelastic** $| \epsilon_s | < 1$
- Zero? **Perfectly inelastic** $| \epsilon_s | = 0$

UNIT ELASTIC : $| \epsilon_s | = 1$

