Proof

- Let $\varphi \in \{\varphi \in V' : U \subset \text{null } \varphi\}$
- $\varphi(u) = 0$ for $u \in U$ since $U \subset \text{null } \varphi \Rightarrow \varphi \in U^0$
- Thus $\{\varphi \in V' : U \subset \text{null } \varphi\} \subset U^0$

- Let $\pi \in U^0$
- $\pi(u) = 0$ for all $u \in U$ by definition U^0
- $U \subset \text{null } \pi$ for arbitrary $\pi \in U^0$.
- $\pi \in \{\varphi \in V' : U \subset \text{null } \varphi\}$
- Thus $U^0 \subset \{\varphi \in V' : U \subset \text{null } \varphi\}$