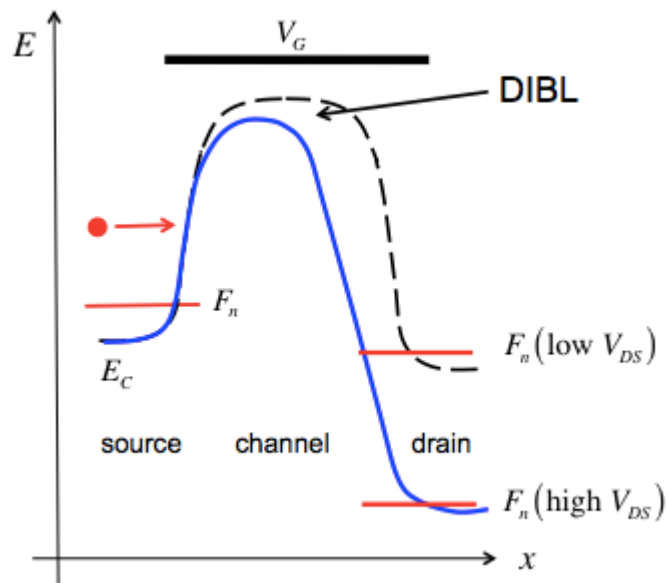


**Essentials of MOSFETs**  
**Lecture 2.2: Energy Band View of the MOSFET**

**Short Problem**  
Mark Lundstrom  
Purdue University, Fall 2018

The energy band diagram below illustrates DIBL.



- 1) At  $T = 300$  K, how much barrier lowering does it take to increase the current by a factor of 10?