

## Course Information — EE 531

### Semiconductor Devices and Device Simulation Physics and Modeling of Nanoscale VLSI Devices Spring 2017

Web Page:	<a href="http://dunham.ee.washington.edu/ee531">http://dunham.ee.washington.edu/ee531</a>
Professor:	Scott Dunham EE 218 206-543-2189 <a href="mailto:dunham@ee.washington.edu">dunham@ee.washington.edu</a> (use GoPost for non-confidential questions)
Office hours:	M 3:00-4:00pm, F 9:00am-10:00am (tentative)
TA:	Yu Jin
Text:	“Fundamentals of Modern VLSI Devices” by Taur and Ning
Reference Texts	“Advanced Semiconductor Fundamentals (Modular Series Vol. VI)” by Pierret “Fundamentals of Carrier Transport” by Lundstrom “Semiconductor Physics and Devices” by Neamen “Device Electronics for Integrated Circuits” by Muller and Kamins “Modern Semiconductor Device Physics,” edited by Sze “Physics of Semiconductor Devices” by Sze “Advanced Theory of Semiconductor Devices” by Hess “Si Processing for the VLSI Era: Vol. 3— The Submicron MOSFET” by Wolf “Advanced MOS Devices” by Schroder “Operation and Modeling of the MOS Transistor” by Tsividis
Simulation Software:	Sentaurus (Synopsys) Available in EE Linux Lab (need EE account first)
Grading Policy:	Homework: 20% Exam 1: 30% Exam 2: 30% Project: 20%
Prerequisite:	Semiconductor Devices (EE 482) or equivalent