**Ankara Üniversitesi**

**Kütüphane ve Dokümantasyon Daire Başkanlığı**

**Açık Ders Malzemeleri**

### Çalışma Planı (Çalışma Takvimi)

| **Haftalar** | **Haftalık Konu Başlıkları**  |
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| 1.Hafta | Semiconductor Diodes |
| * N-type, P-type material
 |
| * Diode, zener regions, ideal diodes
 |
| 2.Hafta | Diode Equivalent Circuits |
| * Ideal diode and equivalent circuit
 |
| * Conduction directions
 |
| 3.Hafta | Diode Applications – Series and parallel configurations |
| * Series diode circuits
 |
| * Parallel diode circuits
 |
| * Cilpper and Clamper circuits
 |
| 4.Hafta | Diode Applications – Half wave and Full wave rectification |
| * Half wave rectification
 |
| * Full wave rectification
 |
| * Zener diodes, zener resistor values
 |
| * Voltage multipliers
 |
| 5.Hafta | Bipolar Junction Transistor (BJT) Common Base (CB) Configuration |
| * Transistor construction and operation
 |
| * CB configuration
 |
| * CB amplifier
 |
| * Operation regions
 |
| 6.Hafta | BJT Common Emitter (CE)and Common Collector (CC) Configurations |
| * Common emitter configuration and characteristics
 |
| * CE amplifier currents
 |
| * Beta value
 |
| * CC configuration and characteristics
 |
| 7.Hafta | BJT DC Biasing – Operating Point |
| * DC biasing, operating point
 |
| * Biasing and three states of operation
 |
| * Active, cut-off and saturation regions
 |
| 8.hafta | BJT DC Biasing – Fixed bias circuit, emitter-stabilized bias circuit |
| * DC biasing circuits
 |
| * Fixed bias circuits
 |
| * Emitter stabilized bias circuit
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| * Voltage divider
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| * Voltage feedback circuit
 |
| 9.Hafta | BJT DC Biasing – Miscellaneous Bias Configurations |
| * Transistor switching circuit
 |
| * Switching circuit calculations
 |
| * Switching time
 |
| 10.Hafta | Field-Effect Transistor (FET) |
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 |
| * FET types
 |
| * JFET construction, operation characteristics
 |
| 11.Hafta | Depletion Type MOSFET and Enhancement Type MOSFET |
| * MOSFET types
 |
| * Depletion type MOSFET and operation characteristis
 |
| * P-channel depletion type MOSFET
 |
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| 12.Hafta | FET DC Biasing – Fixed bias and self-bias configuration |
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 |
| * JFETs
 |
| * Fixed-Bias Configuration
 |
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 |
| * Voltage-Divider Bias
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 |
| 13.Hafta | FET DC Biasing – Voltage Divider Biasing, Common-gate biasing |
| * Depletion-type MOSFET bias circuits
 |
| * Self-Bias
 |
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 |
|  | * Voltage-Divider Biasing
 |
| 14.Hafta | CMOS Circuits |
| * CMOS construction
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| * CMOS inverter
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