## 6.014 – Electrodynamics – Spring 2002

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| 39       4/25       Fiber optics, applications, dielectric slab waveguide       DEMO μW fiber       DROP DATE       L18       7.2         40       4/26       Optical devices, systems, applications       R20       New         41       4/30       Optical devices, systems, applications       L19       New         42       5/1       Optical amplifiers, lasers, quantum systems       R21       New         42       5/1       Optical amplifiers, lasers, quantum systems       R21       New         MEMS         43       5/2       Examples, Lorentz forces on e-beams, C plates, force from ∂w/∂z; generators       L20       New         44       5/3       Examples: force via system energy derivatives, electric-field motors, generators       R22       L20 notes         Forces, Power Generation and Transmission         45       5/7       Magnetic forces: electron optics, motors and generators, Hall effect       L21       New         46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49   | Optical                         | Communications  |      |                                |  |
| 40       4/26       Optical devices, systems, applications       R20       New         41       4/30       Optical devices, systems, applications       L19       New         42       5/1       Optical amplifiers, lasers, quantum systems       R21       New         42       5/1       Optical amplifiers, lasers, quantum systems       R21       New         MEMS         43       5/2       Examples, Lorentz forces on e-beams, C plates, force from ∂w/∂z; generators       L20       New         44       5/3       Examples: force via system energy derivatives, electric-field motors, generators       R22       L20 notes         Forces, Power Generation and Transmission         45       5/7       Magnetic forces: electron optics, motors and generators, Hall effect       L21       New         46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49       5/14       Power transmission lines and systems       L23       New         50       5/15       Review of 6.014, emphasizing material after Q   | 39 4/25                         | Fiber optics, applications, dielectric slab waveguide DEMO uW fiber DROP DATE                         | L18  | 7.2                            |  |
| 41       4/30       Optical devices, systems, applications       L19       New         42       5/1       Optical amplifiers, lasers, quantum systems       R21       New         42       5/1       Optical amplifiers, lasers, quantum systems       R21       New         43       5/2       Examples, Lorentz forces on e-beams, C plates, force from ∂w/∂z; generators       L20       New         44       5/3       Examples: force via system energy derivatives, electric-field motors, generators       R22       L20 notes         Forces, Power Generation and Transmission         45       5/7       Magnetic forces: electron optics, motors and generators, Hall effect       L21       New         46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49       5/14       Power transmission lines and systems       L23       New         50       5/15       Review of 6.014, emphasizing material after Quiz 2       5/16       Course Philosophy, Acoustics; DEMO He resonator and keys       L24       New (10)   | 40 4/26                         | Optical devices, systems, applications  | R20  | New                            |  |
| 42       5/1       Optical amplifiers, lasers, quantum systems       R21       New         MEMS         43       5/2       Examples, Lorentz forces on e-beams, C plates, force from $\partial w/\partial z$ ; generators       L20       New         44       5/3       Examples: force via system energy derivatives, electric-field motors, generators       R22       L20 notes         Forces, Power Generation and Transmission         45       5/7       Magnetic forces: electron optics, motors and generators, Hall effect       L21       New         46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49       5/14       Power transmission lines and systems       L23       New         50       5/15       Review of 6.014, emphasizing material after Quiz 2       5/15       124       New (10)  | 41 4/30                         | Optical devices, systems, applications  | L19  | New                            |  |
| MEMS         43       5/2       Examples, Lorentz forces on e-beams, C plates, force from $\partial w/\partial z$ ; generators       L20       New         44       5/3       Examples: force via system energy derivatives, electric-field motors, generators       R22       L20 notes         Forces, Power Generation and Transmission         45       5/7       Magnetic forces: electron optics, motors and generators, Hall effect       L21       New         46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49       5/14       Power transmission lines and systems       L23       New         50       5/15       Review of 6.014, emphasizing material after Quiz 2       5/16       Course Philosophy, Acoustics; DEMO He resonator and keys       L24       New (10)  | 42 5/1                          | Optical amplifiers, lasers, quantum systems   | R21  | New                            |  |
| 43       5/2       Examples, Lorentz forces on e-beams, C plates, force from $\partial w/\partial z$ ; generators       L20       New         44       5/3       Examples: force via system energy derivatives, electric-field motors, generators       R22       L20 notes         Forces, Power Generation and Transmission         45       5/7       Magnetic forces: electron optics, motors and generators, Hall effect       L21       New         46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49       5/14       Power transmission lines and systems       L23       New         50       5/15       Review of 6.014, emphasizing material after Quiz 2       5/16       Course Philosophy, Acoustics; DEMO He resonator and keys       L24       New (10)   | MEMS                            | • •   |      |                                |  |
| 44       5/3       Examples: force via system energy derivatives, electric-field motors, generators       R22       L20 notes         Forces, Power Generation and Transmission         45       5/7       Magnetic forces: electron optics, motors and generators, Hall effect       L21       New         46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49       5/14       Power transmission lines and systems       L23       New         50       5/15       Review of 6.014, emphasizing material after Quiz 2       5/15       124       New (10)  | 43 5/2                          | Examples Lorentz forces on e-beams C plates force from $\frac{\partial w}{\partial z}$ generators     | L20  | New                            |  |
| Forces, Power Generation and Transmission       L21       New         45       5/7       Magnetic forces: electron optics, motors and generators, Hall effect       L21       New         46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49       5/14       Power transmission lines and systems       L23       New         50       5/15       Review of 6.014, emphasizing material after Quiz 2       1       5/16       Course Philosophy, Acoustics; DEMO He resonator and keys       L24       New (10)   | 44 5/3                          | Examples: force via system energy derivatives, electric-field motors generators                       | R22  | L20 notes                      |  |
| 45       5/7       Magnetic forces: electron optics, motors and generators, Hall effect       L21       New         46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49       5/14       Power transmission lines and systems       L23       New         50       5/15       Review of 6.014, emphasizing material after Quiz 2       1         51       5/16       Course Philosophy, Acoustics; DEMO He resonator and keys       L24       New (10)  | Forces                          | Power Generation and Transmission   |      |                                |  |
| 46       5/8       Review, electric and magnetic forces, motors and generators       R23       L20, 21 notes         47       5/9       Reluctance motors, permanent magnets, wave forces       L22       New         48       5/10       Examples, forces, solenoids       R24       L22 notes         49       5/14       Power transmission lines and systems       L23       New         50       5/15       Review of 6.014, emphasizing material after Quiz 2       1         51       5/16       Course Philosophy, Acoustics; DEMO He resonator and keys       L24       New (10)  | 45 5/7                          | Magnetic forces: electron ontics, motors and generators, Hall effect                                  | I 21 | New                            |  |
| 47     5/9     Reluctance motors, permanent magnets, wave forces     L22     New       48     5/10     Examples, forces, solenoids     R24     L22 notes       49     5/14     Power transmission lines and systems     L23     New       50     5/15     Review of 6.014, emphasizing material after Quiz 2     L24     New (10)  | 46 5/8                          | Review electric and magnetic forces motors and generators   | R23  | L20 21 notes                   |  |
| 48     5/10     Examples, forces, solenoids     R24     L22     ndw       49     5/14     Power transmission lines and systems     L23     New       50     5/15     Review of 6.014, emphasizing material after Quiz 2     L24     New (10)   | 47 5/9                          | Reluctance motors permanent magnets wave forces   | 1.22 | New                            |  |
| 49     5/14     Power transmission lines and systems     L23     New       50     5/15     Review of 6.014, emphasizing material after Quiz 2     L24     New (10)   | 48 5/10                         | Examples, forces, solenoids   | R24  | L22 notes                      |  |
| 50     5/15     Review of 6.014, emphasizing material after Quiz 2       51     5/16     Course Philosophy, Acoustics; DEMO He resonator and keys  | 49 5/14                         | Power transmission lines and systems  | L23  | New                            |  |
| 51 5/16 Course Philosophy, Acoustics; DEMO He resonator and keys L24 New (10)  | 50 5/15                         | Review of 6.014, emphasizing material after Ouiz 2  |      |                                |  |
|  | <u>51 5/16</u>                  | Course Philosophy, Acoustics; DEMO He resonator and keys  | L24  | New (10)                       |  |