## PHY7610 Syllabus

**Prerequisites:** PHY7600. This is a 3-hrs credit course.

**Intended audience:** Graduate students.

**Synopsis:** Maxwell equations, plane and spherical waves, waveguides, scattering and diffraction, plasma physics, relativity, relativistic dynamics, collision between charged particles, radiation by moving charges.

**Textbook**: J. D. Jackson, Classical Electrodynamics, Third Edition, Wiley, ISBN 978-00471030932-1.

**Lecture Notes:** Originally written by Prof. J. Wadehra, with updates.

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**Homeworks:** Five per semester, given in class. Approximately 7 problems per homework. **Exams:** Three intermediate exams (four problems per exam), one final exam (six problems).