

Northern Illinois University

Course Syllabus for Physics 659 --- Special Problems in Physics

Fall Semester, 2018

Instructor: Dennis Eugene Brown Faraday West 208W and/or 213W
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Office Hours: TTh 10am-12:30,2-3:30pm tel: 630-910-5512

Course Textbook: Mossbauer Spectroscopy **Author:** Dickson&Berry

We will meet twice a week for 1 hour 15 min to discuss Mossbauer Spectroscopy and experimental laboratory techniques. Goal of the class will be to derive the spin Hamiltonian describing the mechanism of the magnetic hyperfine interaction, and to write the source code to diagonalize the full Hamiltonian to find its eigenvalues and eigenvectors.

There will be no quizzes or Final Exam

The final grade will be determined by progress made on the problem described above.