课程名（Coursename）

Introductory Quantum Mechanics I

课程代码（Coursenumber）

5.73

课程对象（Audience）

Graduate

选课前提（prerequisite）

5.61, 8.03, 18.03

单元（units）

2-0-4

添加至时间表 （add to schedule）

开课教师（Teacher）

R. G. Griffin

学期（Semester）

fall term

课程描述（Description）

Fundamental concepts of quantum mechanics: wave properties, uncertainty principles, Schrodinger equation, and operator and matrix methods. Basic applications to: one-dimensional potentials (harmonic oscillator), three-dimensional centrosymetric potentials (hydrogen atom), and angular momentum and spin. Approximation methods: WKB method, variational principle, and perturbation theory.

备注（notes）

H-level Grad Credit

教参信息（Textbookinfo）

1 Introductory Quantum Mechanics (4th Edition) by Richard L. Liboff (Hardcover - Aug. 18, 2002)

Publisher: Addison Wesley; 4 edition (August 18, 2002)

ISBN-13: 978-0805387148

世界各地拥有馆藏的图书馆（OCLC）:219

2 Introductory Quantum Mechanics for Semiconductor Nanotechnology by Dae Mann Kim (Hardcover - May 10, 2010)

Publisher: Wiley-VCH (May 10, 2010)

ISBN-13: 978-3527409754

世界各地拥有馆藏的图书馆（OCLC）:10

3 Mathematics for Quantum Mechanics: An Introductory Survey of Operators, Eigenvalues, and Linear Vector Spaces (Dover Books on Mathematics) by John David Jackson (Paperback - Oct. 6, 2006)

Publisher: Dover Publications; Dover Ed edition (October 6, 2006)

ISBN-13: 978-0486453088

世界各地拥有馆藏的图书馆（OCLC）:26

4 Introductory Applied Quantum and Statistical Mechanics by Peter L. Hagelstein, Stephen D. Senturia, and Terry P. Orlando (Hardcover - Mar. 25, 2004)

Publisher: Wiley-Interscience; 1 edition (March 25, 2004)

ISBN-13: 978-0471202769

世界各地拥有馆藏的图书馆（OCLC）:164

5 An Introduction to Quantum Physics (Mit Introductory Physics Series) by A. P. French and Edwin F. Taylor (Paperback - Nov. 30, 1979)

Publisher: CRC Press; New edition (November 30, 1979)

ISBN-13: 978-0748740789

6 Modern Introductory Physics by Charles H. Holbrow, James N. Lloyd, Joseph C. Amato, and Enrique Galvez (Hardcover - July 1, 2010)

Publisher: Springer; 2nd ed. edition (July 1, 2010)

ISBN-13: 978-0387790794

世界各地拥有馆藏的图书馆（OCLC）:2

7 Introductory Statistical Mechanics by Roger Bowley and Mariana Sanchez (Paperback - Jan. 20, 2000)

Publisher: Oxford University Press, USA; 2 edition (January 20, 2000)

ISBN-13: 978-0198505761

8 Structure of Matter: An Introductory Course with Problems and Solutions (UNITEXT / Collana di Fisica e Astronomia) by Attilio Rigamonti and Pietro Carretta (Paperback - Mar. 16, 2009)

Publisher: Springer; 2nd ed. edition (March 16, 2009)

ISBN-13: 978-8847011281

世界各地拥有馆藏的图书馆（OCLC）:28

9 Quantum Mechanics: A Modern and Concise Introductory Course (Advanced Texts in Physics) by Daniel R. Bès (Paperback - June 11, 2007)

Publisher: Springer; 2nd edition (June 11, 2007)

ISBN-13: 978-3540462156

世界各地拥有馆藏的图书馆（OCLC）:118

10 Modern Introductory Physics (Undergraduate Texts in Contemporary Physics) by Charles H. Holbrow, James N. Lloyd, Joseph C. Amato, and Enrique Galvez (Hardcover - Dec. 21, 1998)

Publisher: Springer; 1 edition (December 21, 1998)

ISBN-13: 978-0387985763