

School of Physics

Course Outline 2022

PHYS2111

Quantum Physics

School of Physics

Faculty of Science

T1, 2022

CRICOS Provider Code 00098G

1. Staff

| Position | Name | Email | Consultation times and locations | Contact Details |
|--------------------|---------------|-----------------------------|-------------------------------------|-----------------|
| Course Convenor | Adam Micolich | adam.micolich@gm ail.com | | |

4. Acquire and interpret experimental data for laboratory experiments related to basic quantum mechanical phenomena.

2.3 Relationship between course and program learning outcomes and assessments

Course learning outcomes 1-3 are assessed by assignments, quizzes and final exam. These assessments are largely of a problem-solving nature designed to determine students' ability to deploy acquired knowledge to new situations, which is a key graduate attribute for successful physics-trained graduates. Course learning outcomes 1 and 4 are also assessed via the laboratory component of the assessment.

3. Strategies and approaches to learning

3.1 Learning and teaching activities

Laboratory Information

The laboratory component of the course will be held in the Physics Laboratory, Room 142, Old Main Building. For details about labs, see <u>http://timetable.unsw.edu.au/2022/PHYS2111.html</u> or contact Laboratory Staff. The laboratory manager is Tamara Reztsova (<u>t.reztsova@unsw.edu.au</u>)

3.2 Expectations of students

Attendance at workshop and tutorial classes and engagement with the formative assessment (Moodle quiz component) is strongly encouraged. Strong engagement with course material and formative assessment during the term is highly correlated with strong performance in the final summative assessment components (e.g., final exam).

Academic misconduct will not be tolerated in any form in this course. Substantiated instances of cheating, plagiarism or copying of answers may result in penalties ranging from a significant deduction of marks did as fails grades i(ubbs) 2c(tbb22ddeTjiCax 0p-1.317-c (f)4 (l).1 nt0 d1.317i)5-towtai u

| 6 | Flexibility week (no classes by university requirement) |
|---|---|
| | |
| 7 | Wavefunctions and expectation values (PJR) Infinite and finite square wells (PJR))PJR |

5.2 Assessment criteria and standards

Please see Moodle for a marking details for each assessment task.

5.3 Submission of assessment tasks

Unless otherwise specified, assignments should be submitted via Moodle/Turnitin by the specified time and date on Moodle for the given task. Assignments will not be accepted in hard-copy form or via email. Marks will be deducted for late assignments according to university policy.

5.4. Feedback on assessment

Please see Moodle for details on how feedback will be provided for each assessment task.

6. Academic integrity, referencing and plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at student.unsw.edu.au/referencing

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage.¹ At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in

Laboratory Information

Two experiments need to be conducted during the laboratory period. These are conducted in the Higher Year Laboratory on the first level of the Old Main Building. Before your first lab class, you must complete the online OH&S induction on Moodle. Lab classes are streamed; you will have selected your stream codes upon enrolment. For details of lab days, times and class please see http://timetable.unsw.edu.au/2021/PHYS2111.html

Other Resources

The PHYS2111 lecture notes will be posted to Moodle.

Additional resources such as articles, papers, websites, other published material will be referred to during lectures and listed at the Moodle site.

8. Administrative matters

Communications

Students should check their UNSW email account regularly as all official university communication will be sent to that address. Students should use their university email account when writing to UNSW staff and should always include their name and student number.

Health and Safety

The School of Physics is actively committed to the health, safety and welfare of its staff and students. Information on relevant UNSW Occupational Health and Safety policies and expectations is available at: www.ohs.unsw.edu.au and <u>https://www.physics.unsw.edu.au/about/safety</u>

Recommended Internet Sites

The School of Physics website is <u>www.physics.unsw.edu.au</u>. Under the "Current Students" link students will find information about degrees, courses, and assessment.

The University website <u>my.unsw.edu.au</u> provides links to the UNSW Handbook, Timetables, Calendars and other student information.

Student Complaint Procedures

UNSW has procedures for dealing with complaints. These aim to solve grievances as quickly and as close to the source as possible. Information is available here: student.unsw.edu.au/complaints. Staff who can assist include:

School Contacts:

| Zofia Krawczyk-Bernotas | Adam Micolich |
|---------------------------------|-----------------------------|
| Teaching Support Manager | Teaching Director |
| School of Physics | School of Physics |
| Room G06, OMB | Room G57A, OMB |
| z.krawczyk-bernotas@unsw.edu.au | adam.micolich@gmail.com |
| Tel: 9065 5719 | Tel: 9385 6132 |
| | |
| Prof Susan Coppersmith | A/Prof Julian Berengut |
| Head of School | Honours Coordinator |
| School of Physics | School of Physics |
| s.coppersmith@unsw.edu.au | julian.berengut@unsw.edu.au |

9. Additional support for students

The *Current Students* Gateway: <u>student.unsw.edu.au</u> Academic Skills and Support: <u>student.unsw.edu.au/skills</u> Student Wellbeing, Health and Safety: <u>student.unsw.edu.au/wellbeing</u> Disability Support Services: <u>student.unsw.edu.au/disability</u> UNSW IT Service Centre: <u>www.it.unsw.edu.au/students</u>