

# **School of Physics**

# Course Outline 2021

# PHYS4200 / SCIF2041 / SCIF3041

Taste of Research

PHYS1200 Step into Research

School of Physics

Faculty of Science

T3, 2021

## 1. Staff

Position	Name	Email	Consultation times and locations	Contact Details
Course Convenor	Sarah Martell	s.martell@unsw.edu.au	Consultation times: by arrangement via email	(02) 9385 6547
Teaching Support Officer	Zofia Krawczyk- Bernotas	z.krawczyk- bernotas@unsw.edu.au	School of Physics office G06, Old Main Building	(02) 9385 5969

# 2. Course information

Units of credit: 6

Students can register for these course codes to earn course credit, or they can participate in a research project voluntarily.

Teaching times and locations: online

# 2.1 Course summary

Taste of Research runs in T3 yearly. It is intended for second- and third-year undergraduates, and has no prerequisites.

Step into Research is the version of ToR for first-year undergraduates.

Both programs are open to students from all courses at UNSW.

#### Taste of Research:

Students can register for PHYS4200 or SCIF2041/3041 to earn 6 units of science elective. To enrol in these courses, students need to obtain permission from the school.

Students in PHYS4200 are marked on the HD/DN/CR scale. Students in SCIF2041 or SCIF3041 are marked pass/fail.

The marking criteria are 50% for a written report (marked by their supervisor and one other academic), 30% for research performance (as rated by their supervisor), 20% for final presentation (as rated by the audience at the presentations).

Final reports are due by the end of Week 10, and presentations will be scheduled in Week 11.

Students who participate in ToR voluntarily are still expected to give a research presentation at the end of T3.

### Step into Research:

Students can register for PHYS1200 to earn 6 units of science elective. To enrol in these courses, students need to obtain permission from the school.

Students in PHYS1200 are marked on the HD/DN/CR scale. The marking criteria are 50% for a written report (marked by their supervisor and one other academic), 30% for research performance (as rated by their supervisor), 20% for final presentation (as rated by the audience at the presentations). The expectations are not as high as in Taste of Research since first year students have less coursework background.

Final reports are due by the end of Week 10, and presentations will be scheduled in Week 11.

Students who participate in ToR voluntarily are still expected to give a research presentation at the end of T3.

## 2.2 Course aims

The aims of this course are for students to gain experience participarting in a research project in physics or astronomy.

#### **Graduate Attributes Developed in this Course:**

- Research, inquiry and analytical thinking abilities
- Communication in a scientific/technical context
- Collaborative and management skills
- Information literacy

# 2.3 Course learning outcomes (CLO)

By the end of this course, you will be able to:

- Conduct research on a physics or astronomy topic
- Explain your research topic, goals, and results in written and spoken forms
- Collaborate with other members of your research group

# 2.4 Relationship between course and program learning outcomes and assessments

The course learning outcomes are assessed in the three assessment tasks. These assessments are largely of a critical-thinking nature designed to determine students' ability to deploy acquired knowledge to new situations, which is a key capability for successful university graduates.

# 3. Strategies and approaches to learning

# 3.1 Learning and teaching activities

### **Assumed Knowledge**

Passing mark or higher in a course such as PHYS1121/1131/1141, PHYS1221/1231/1241, MATH1131/1141, MATH1231/1241 or equivalent. There are no preprequisites for Taste of Research, however students are expected to have an understanding of basic physics and maths principles.

#### **Timetable**

The only scheduled class meeting for this course is the student presentation session. This will be held in Week 11, and scheduled according to student availability. Work is determined by the project content and the supervisor. Students are expected to communicate with their supervisors regularly.

# 3.2 Expectations of students

We believe that effective learning is best supported by a climate of enquiry, in which students are actively engaged in the learning process. The Taste of Research and Step into Research programs provide students with the opportunity for direct research experience. Effective learning in this environment is achieved when students ask questions and take initiative.

**Academic misconduct will not be tolerated in any form in this course**. Substantiated instances of cheating, plagiarism or copying answers may result in a failure grade or significant deduction of marks. Please <a href="https://student.unsw.edu.au/plagiarism">https://student.unsw.edu.au/plagiarism</a> if you are in any way unsure of what constitutes plagiarism. Assignments in this class are to be done independently.

# 4. Course schedule and structure

The schedule of each project will be negotiated between the student and the supervisor.

## 5. Assessment

## 5.1 Assessment tasks

#### **Assessment**

Assessment task	Length	Weight	Mark	Due date (normally midnight on due date)
Written Report	10 pages	50%		Week 10
Research Performance		30%		
Final Presentation	5 minutes	20%		Week 11

#### **Further information**

UNSW grading system: student.unsw.edu.au/grades

 $UNSW\ assessment\ policy:\ student.unsw.edu.au/assessment 5.2$ 

## Assessment criteria and standards

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

## 5.3 Submission of assessment tasks

### **Assignment Submissions**

Unless otherwise specified, assignments should be submitted by email to the project supervisor by 11:50pm Friday of Week 10.

Marks will be deducted for late assignments, at a rate of 5% of the maximum possible mark for the assignment per day. A weekend will count as two days.

## 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 <a href="mailto:student.unsw.edu.au/referencing">styles</a> can be located at <a href="mailto:student.unsw.edu.

**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. 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 your work.

Further information about academic integrity and plagiarism can be located at:

- The Current Students site student.unsw.edu.au/plagiarism, and
- The ELISE training site subjectguides.library.unsw.edu.au/elise

The *Conduct and Integrity Unit* provides further resources to assist you to understand your conduct obligations as a student: student.unsw.edu.au/conduct.

# 7. Readings and resources

#### **Recommended Text:**

By arrangement with the research supervisor

# 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.

<sup>&</sup>lt;sup>1</sup> International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013.

#### **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 <a href="https://www.physics.unsw.edu.au/about/safety">https://www.physics.unsw.edu.au/about/safety</a>

#### **Recommended Internet Sites**

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

The University website my.unsw.edu.au 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 Prof. 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: 9385 5969 Tel: 9385 6132

Prof. Susan Coppersmith A/Prof. Sarah Martell

Head of School Taste of Research Coordinator

School of Physics School of Physics

s.coppersmtih@unsw.edu.au s.martell@unsw.edu.au

Tel: 9385 4553 Tel: 9385 6547

# 9. Additional support for students

• The Current Students Gateway: student.unsw.edu.au

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: www.it.unsw.edu.au/students