PHYS4060 — atom optics research paper presentation 2006

For this assessment exercise you should choose one paper from the list provided here:

`http://www.physics.uq.edu.au/people/mdavis/phys4060/`

There are hyperlinks to the electronic versions of them (most of which must be accessed on the UQ network, as they require the University's subscription.)

You should select your paper, and register your selection with the lecturer before the mid-semester break.

Your task is to read this paper, understand the experiment, how it relates to the course material, the physics that it elucidates, and summarise and present what you have learnt to the rest of the group. Presentations will be in the last week of semester (October 23–27 2006), and will last for 20 minutes with five minutes allowed for questions. This assessment will make up 20% of your final grade for the course.

The emphasis is on the presentation of physics contained in the paper to the class in a manner that is easily followed. The lecturers for the course are willing to provide as much help as necessary prior to the presentation. HOWEVER: don't leave it until week 13 as we are likely to be unsympathetic!

Your presentation should be planned keeping the following points in mind:

- It should begin by summarising the essential background physics required for to understand the paper — place it in the context of what has been covered in lectures. This is worth 30% of the grade.
- The presentation of the results and the implications of the experiment are worth 50% of the grade.
- It is almost certain that clarification will be necessary, and the class is expected to ask questions along the way. Twenty percent of the grade is based on the handling of questions.
- You may use any props, presentation techniques, etc, that you desire — be inventive! Make your presentation as interesting as possible. If you require computer presentations facilities please discuss this with the lecturers before your alloted time slot.
- The assessment will be marked by the students and the lecturers using the criteria sheet overleaf with space for comments (which should be constructive or positive). The final mark will be weighted evenly between these groups. The names will be removed from the marking sheets, and will be returned to the presenter for feedback.
- It is expected that the entire class will attend all presentations and take place in the assessment. Marks will be deducted otherwise.

Matthew Davis, 12th September 2006.

ASSESSOR:

PRESENTER:

DATE:

Grade	5	4	3	2	1
Introduction and coverage of background theory (30%)	Shows outstanding understanding and background knowledge.	Demonstrates sound basic knowledge and understanding.	Exhibits adequate basic knowledge.	The apparent knowledge and understanding of the relevant physics is limited.	Shows little evidence of knowing the relevant physics.
Communication of experimental results (50%)	The audience understands the experiments completely.	The audience understands the purpose of the experiment, although some parts need further explanation.	The audience mostly understands the experiment, despite occasional difficulty.	The audience has difficulty understanding the purpose of the experiment.	The audience can hardly understand the experiment at all.
Handling of questions (20%)	Fair questions from audience are answered clearly and concisely.	Good attempts to answer questions, despite some longwindedness.	Questions answered with some misunderstandings.	Attempts to answer questions, although answers difficult to understand.	Questions seem not to be understood.

Marks:

Introduction (A)	Communication (B)	Questions (C)	Final mark / 100 (6A + 10B + 4C)

Comments: