

Introductory General Physics course (Sassi-Smaldone)

Novembre - December 2006 Gulu

1) Is the programme going to be theoretical or practical ?

Neither, a mix of lectures and practicals (low-cost materials, paper/pencil, Real-Time, traditional apparatuses)

2) How is the programme going to be assessed?

Coursework = Portfolio

Written tasks (class + homework), Practical (40%)

Exam (60%)

Introductory General Physics course (Sassi-Smaldone)

November - December 2006 Gulu

**The importance of the programme or applicability of the
Knowledge from the programme in the day-to-day life**

- **Improving your Physics Knowledge (re-building “grey zones”)**
 - **Learning to present Physics in secondary school**
 - **Experiments and Materials usable at your future school**
 - **Integration with your current syllabi**
 - **Using notes when text-books are not around or enough**

How can you get better ?

Stop us when what is said is NOT clear and ASK

React as much as you can

Make a rich Portfolio

Propose adaptations to local contexts

Ask about your previous unclear topics

Main Components of IGP course

Some emblematic topics of:

Basic Physic, Astronomy, Physics Education

TASKS (course-work) will be named

in class T1, T2, T3, Or Prac1, Prac2, Prac3,

At home HW1, HW2, HW3,

QUESTION-TIME

- Write on a slip of paper the questions you have not asked during the sessions (or not related to session content) and your name**
- Answers will be discussed during sessions or in extra-time under the mango tree. Take notes about the answers**
- Put questions and answers in your Portfolio**

Analysis of Questionnaire n. 0

16 answers

Topics to be clarified

<p>TOO LARGE</p> <p>physics (classical, general, practical, modern)</p> <p>electro-magnetism 3</p> <p>mechanics 2</p> <p>waves 2</p> <p>Relativity</p> <p>Optics</p>	<p>*gravitation (satellites, stars, moon, ...)</p> <p>4</p> <p>*inertial frame of reference</p> <p>particles in e.m. field 2</p> <p>*?galileo, lorentz transformations 3</p> <p>*circular motion 2</p> <p>II law of thermodynamics</p> <p>rigid bodies, inertia momentum 2</p> <p>*harmonic motion</p> <p>Heat transfer ...</p> <p>Seminar on request (with II an III stud.)</p>
<p><i>complex numbers (M)</i></p> <p><i>differential equations (M)</i></p>	<p>Calibration of a thermometer</p>

Practicals not good:

lack of apparatuses, apparatuses not used before, lack of theoretical knowledge, lack of time

Analysis of Questionnaire n. 0

16 answers

• Self assessment:

scarce(), low (), medium (11), good(4), very good(1)

• Practicals done:

- errors in measure 4 VERY BASIC
 - focal length (lens , mirror) 7
 - length measure (venier, caliper) 7
 - use of Cathode Ray Oscill 9
 - acceleration g 1
 - R of resistor 3
 - Boltzman 3
 - Young modulus 1
 - use of travelling microscope 5

Analysis of Questionnaire n. 0

16 answers

Practicals you'd like to do

Use of travelling microscope

Use of CRO

Acceleration due to gravity

Verification Hook's law

Errors in measures

Boltzman constant

R of a resistor

Focal length of a lens

Conservation of linear momentum

Moment of inertia

Wave theory

Electric current

Sound energy

LIGHT

NUCLEAR PHYSICS

MECHANICS

TELESCOPE

ELECTROMAGNETISM