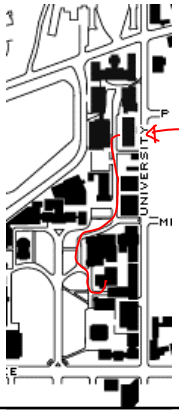
Welcome to PHYS-131
Mechanics and Waves



This class is **HUGE**, so we split it into two groups.
Same times, same lecture, different hall:

Students in an **Arts Program** or in an **Arts and Science Program** or in **Education,** and **Exchange Students**:
Please move to Room 118 in the Rutherford Physics Building.

Today's Lecture

- The syllabus for PHYS-131
- A word on mathematics

Syllabus (full text on WebCT)

- PHYS-131 consists of several parts:
  - lecture
  - online homework
  - laboratory sessions
  - tutorials
  - **your own individual learning efforts**
  - final exam

Instructor

- Prof. Roland Bennewitz
- Office
  Ernst Rutherford Physics Bldg.,
  Room 4.11
- Office hours:
  Monday and Wednesday
  2 p.m. – 3 p.m.
  or by appointment
- email: via WebCT email only

WebCT (www.mcgill.ca/webct)

WebCT is your online resource for PHYS-131

- Schedules
- Announcements
- Online homework
- Email to instructor, teaching assistants, and fellow students
- Monitored discussion board for general questions

Lecture

- Monday, Wednesday, Friday, 11.35 a.m. – 12.25 p.m.
  plus October 10, 2006
- I will prepare a slide presentation, but

- Slides will be posted on WebCT.
  One day before lecture: half-empty to take notes.
  One day after each lecture with my lecture writings.
- "Physics for Scientists and Engineers" by Serway and Jewett, 6th Edition, Chapters 1-11, 13, and 15-18.
  Chapters 12 and 14 only if time permits.
- There will be questions to you during the lecture to increase your involvement and provide me with feedback.

Question for You

- In what country did Prof. Bennewitz grow up?
  1. Sweden
  2. Germany
  3. South-Africa

Grading

- 10% Online homework
- 20% Laboratory reports
- 70% Final exam
- Passing the laboratory part of the course is prerequisite to pass the whole course.

Laboratory

- Four sessions, schedule depends on your section of PHYS-131
- Wong Building, Room 0190
- Individual laboratory report for each experiment due one week after the respective session
- Bring your McGill ID
- If you miss a laboratory session without documented excuse, you will receive zero points for that session.

- Organizing TA for the laboratories: Audrey Macleod.

Lab Schedule

Section	Day	Expt 1	Expt 2	Expt 3	Expt 4
002	Monday	Sept 18	Oct 02	Oct 23	Nov 06
003	Tuesday	Sept 19	Oct 03	Oct 24	Nov 07
004	Wednesday	Sept 20	Oct 04	Oct 25	Nov 08
005	Thursday	Sept 21	Oct 05	Oct 26	Nov 09
015	Friday	Sept 22	Oct 06	Oct 27	Nov 10

No labs in the week of Thanksgiving

Section	Day	Expt 1	Expt 2	Expt 3	Expt 4
006	Monday	Sept 25	Oct 16	Oct 30	Nov 13
007	Tuesday	Sept 26	Oct 17	Oct 31	Nov 14
008	Wednesday	Sept 27	Oct 18	Nov 01	Nov 15
009	Thursday	Sept 28	Oct 19	Nov 02	Nov 16
016	Friday	Sept 29	Oct 20	Nov 03	Nov 17

Online Homework (CAPA)

- Access through WebCT
- First set of problems will appear on Friday, September 8.
- First homework due Thursday, September 14, 23.59 p.m.
- Read the CAPA instructions carefully!
  http://capa.physics.mcgill.ca/CAPA/FAQ.html
  http://capa.physics.mcgill.ca/CAPA/help.html
  also linked in WebCT
- Never ever press the "back" or "refresh" button.
- Your Teaching Assistant for CAPA is Gregory Williams (capa3@physics.mcgill.ca) who can also be reached through WebCT mail.

Tutorials

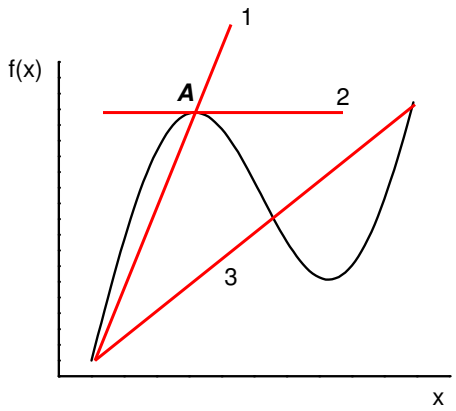
- Wong Building Room 0110
- Drop in when you need it
- You determine the topic and the pace
- Schedule will be announced on WebCT
- Tutorials start next week.

A Word on Mathematics

- Math is a language to express Physics
- We will use basic calculus, which I will review in the lecture
- Let me ask you two questions …

Question for You

- Which of the straight lines in the graph represent the first derivative of the function f(x) at point ***A*** ?



Question for You

- (1) $\int x dx = \frac{1}{2} \ln x + c$
- (2) $\int x dx = \frac{1}{2} x^2 + c$
- (3) The above looks familiar, but I do not know for sure.
- (4) I think I have never learned that stuff.

Question for You

- Please estimate the distance between yourself and Prof. Bennewitz
- What unit does you estimate carry?
  - (1) Meters
  - (2) Feet