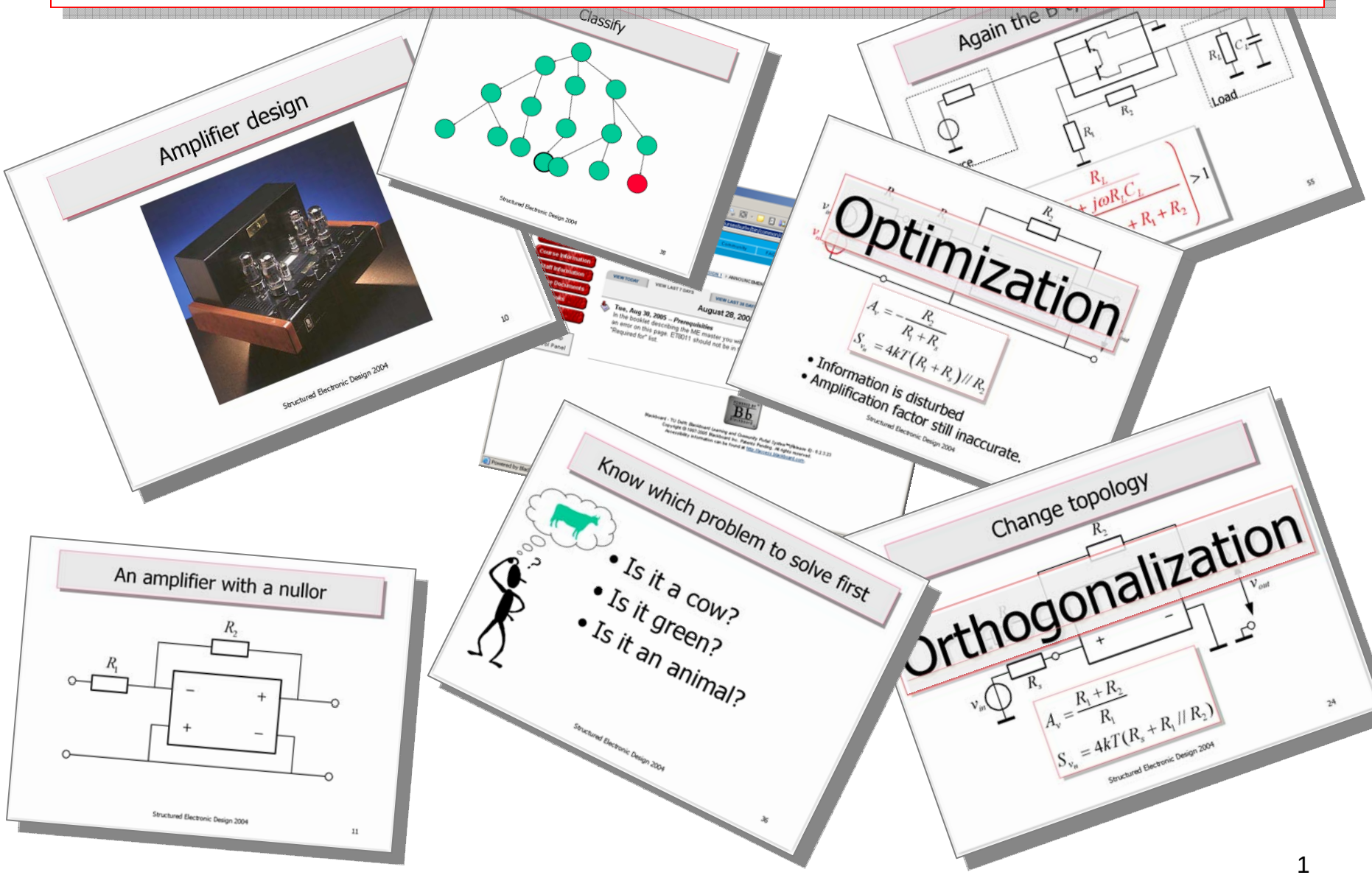
Structured Electronic Design



Schedule

Lectures on Tuesdays, 15:45-17:30 room C
Instructions on Fridays, 13:45-15:30 room G (last instruction DW_1-170)

Date	Time	Location	Event	Topic
February 3	15:45-17:30	Room C	Lecture 1	Introduction
February 6	13:45-15:30	Room G	Instruction	
February 10	15:45-17:30	Room C	Lecture 2	Accurate amplification
February 13	13:45-15:30	Room G	Instruction	
February 17	15:45-17:30	Room C	Lecture 3	Noise
February 20	13:45-15:30	Room G	Instruction	
February 24	15:45-17:30	Room C	Lecture 4	Distortion
February 27	13:45-15:30	Room G	Instruction	
March 3	15:45-17:30	Room C	Lecture 5	Frequency compensation
March 6	13:45-15:30	Room G	Instruction	
March 10	15:45-17:30	Room C	Lecture 6	Biasing
March 13	13:45-15:30	Room G	Instruction	
March 17	15:45-17:30	Room C	Lecture 7	Simulation tools
March 20	13:45-15:30	DW_1-170	Simulation Lab	Hands on experience computer tools: Pspice & Linda

Assessment

- Oral examination in English or Dutch
- Oral examinations can be taken **all year round**

  (but careful planning with respect to other courses is strongly advised!)

- Appointments via secretary:
  - Marion de Vlieger
  - Electronics research lab (18th floor)
  - Room: 18.240
  - Phone: (015-27) 86180
  - E-mail: m.devlieger@tudelft.nl

(for ALL e-mail correspondence, put ET8016 in the subject)

Lecture material

- **Book**

"Structured Electronic Design"
(Available at ETV desk)

- **Slides**, handouts extra information are on blackboard

http://blackboard.tudelft.nl

- Make notes

Using the book

- 10 Chapters
- **1,2 and 3 introduce the complete design method**
- 4-8 provide all details
- 9 : practical current and voltage sources for biasing

  (beyond the scope of this course)
- 10 is a complete design example

  (Use this chapter during the course to study the different design steps.)

Follow up for excellent students

Structured Electronic Design Lab (master class) (ET8011)

- Design and measurement of a negative feedback amplifier
- 3 ECTS credits
- Admission only with minimal grade 8 for this course (ET8016)
- 4-5 students per master class (1-2 classes per year)
- Start date of classes is planned with the students

Contact information lecturers

Chris Verhoeven
Room: 18.130 at EWI
Room: 8.11 at Aerospace engineering (Tuesdays)
Phone nr: (015-27) 86482(ewi) / 85033(ae)

Thijmen Hamoen
Room: 18.140 at EWI
Phone nr: (015-27) 86182

Arash Noroozi
Room: 8:31 at Aerospace engineering
Phone nr: (015-27)85317

All information can be found on: http://blackboard.tudelft.nl
Always put ET8016 in the subject to ensure quick response

Joseph Henry (1797 –1878)

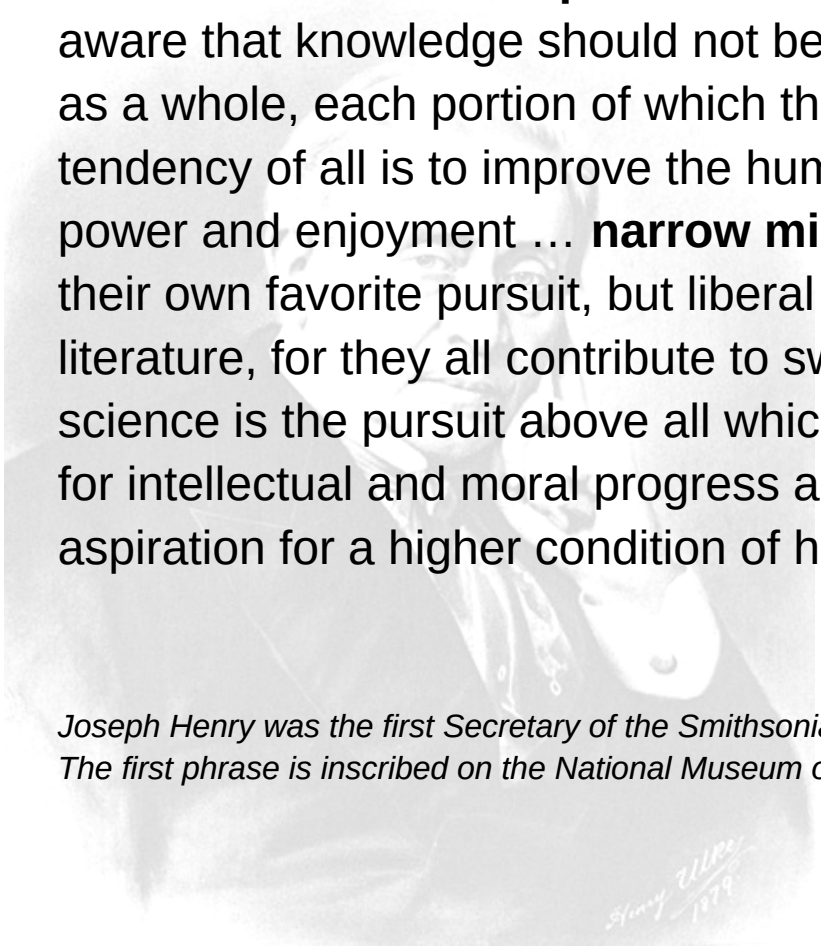
Henry discovered the property of self inductance.

Around the same time, the British scientist Michael Faraday *discovered it as well* and, being first to publish his results, became the officially recognized discoverer of the phenomenon.

http://en.wikipedia.org/wiki/Joseph_Henry

Joseph Henry (1797 –1878)

Modern civilization depends on science …James Smithson was well aware that knowledge should not be viewed as existing in isolated parts, but as a whole, each portion of which throws light on all the other, and that the tendency of all is to improve the human mind, and give it new sources of power and enjoyment … **narrow minds think nothing of importance** but their own favorite pursuit, but liberal views exclude no branch of science or literature, for they all contribute to sweeten, to adorn, and to embellish life … science is the pursuit above all which impresses us with the capacity of man for intellectual and moral progress and awakens the human intellect to aspiration for a higher condition of humanity.



Joseph Henry was the first Secretary of the Smithsonian Institution, named after its benefactor, James Smithson. The first phrase is inscribed on the National Museum of American History, Washington, D.C.

Quoted: A Dictionary of Quotations (1989), 313