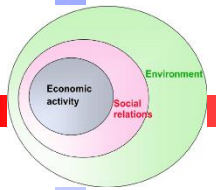
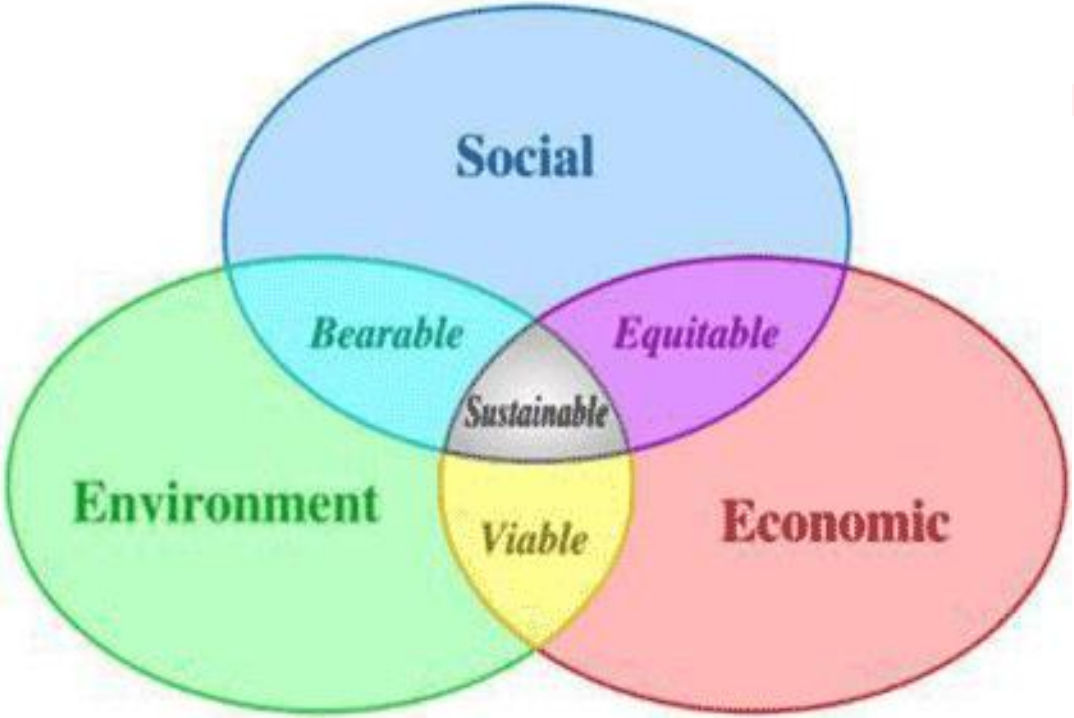
Leadership for Sustainable Development

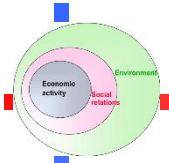
Tecnológico de Monterrey
Graduate programs

Spring, 2019





https://ops.fhwa.dot.gov/publications/fhwahop12006/sec_3.htm



Your professors:

Diego Fabián Lozano García (Dr. Fabián)
Biology, UNAM (Remote Sensing of the Environmet)
M. Sc. Remote Sensing. Purdue University, USA. West Lafayette, IN. USA.
Ph. D. Remote Sensing. Purdue University, West Lafayette, IN. USA.

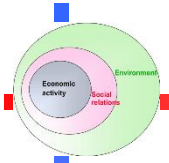
Previous Work Experience:
Researcher at Instituto Nacional de Investigaciones sobre Recursos Bióticos, Xalalpa, Ver.,
Research Asistant at Laboratory for Applications of Remote Sensing (LARS) at Purdue Univ.
Remote Sensing Applications Manager at LARS, Purdue University

Member of Sistema Nacional de Investigadores (SNI) CONACyT

Scientific publications: More tan 50 research papers, several book chapters.

Teaching experience: Graduate level: Leadership for Sustainable Development, Geographic Information Systems, Remote Sensing of the Environment, Environmental Science.
Undergraduate: Geomatics, Ecology and Biodiversity, Geographic Information Systems

At ITESM: Full Professor at Centro de Calidad Ambiental,
Director of Geographic Information Systems Laboratory (LabSIG),



Your professors:

Rosamaría López-Franco (Dra. Roma)

Biology, UNAM (Plant Ecology)

M. Sc. Microbiology. Purdue University, West Lafayette, IN. USA

Ph. D. Biología Celular. Purdue University, West Lafayette, IN. USA

Previous Work Experience: Dirección de Ecología del Gobierno del Edo. Veracruz
Secretaría Forestal y de la Fauna, assigned to Veracruz State

Have been Professor/Researcher at:
UNAM, (UA-Mor, UA-Ver)
Purdue University, ITESM, UDEM

Have been member of Sistema Nacional de Investigadores (SIN) CONACyT

Publications: A book on Mayan Ethnobotany and more than 30 research papers.
Teaching Experience at the Graduate level: Ecology, Sustainable Development, Molecular Biology.
Teaching Experience at the Undergraduate level: Molecular Biology, Biochemistry, Molecular genetics, Microbiology, etc.

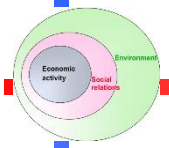
At ITESM: Full Professor at the Biotechinology Center, Director of Biotechnology Master Program, Director of Microbiology Laboratory, Responsible of the Master Research Program in Medicine.
Director of Biotechnology Center, Professor at the School of Medicine.

Who are you?

Please give us the following information and upload it in BB: HOMEWORKS Discussion Board: "The students"

1. Full name (as you are registered):
2. Place of birth:
3. Where do you live:
4. Undergraduate degree (University, School):
5. Graduate program at ITESM:
6. Thesis topic (if you have it already):
7. Where do you work? (if it applies)

Please answer in the indicated order



Where and when to find us:

- Anytime by email PLEASE indicate in the SUBJECT: Your name Course Title and Campus:
  - Ej. SUSTAINABLE DEVELOPMENT Juan Pérez. Campus CDMX
    - Email: rmlopez@tec.mx
    - Email: dflozano@tec.mx
- By phone:
  - 81 8358 1400 ext. 5275 or 5288
- At LabSIG: mondays 4 – 6 pm
- LabSIG is located at: CEDES SS1-1013

Objetive

The student will be able to identify and critically appreciate the concept of sustainable development, within a framework of professional responsibility, proposing alternatives committed to this development scheme: a) that raise the quality of human life and b) with full awareness of their rights and responsibilities.

https://www.slideshare.net/mes0/sustainable-development-goals-sdgs-70859274

Learning methodology

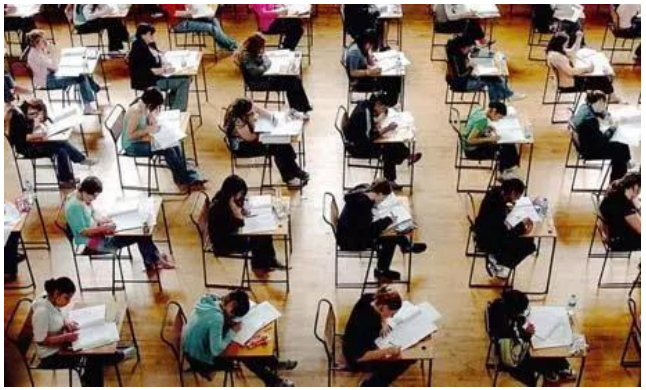
The course will include:

- Teacher presentations
- Presentations by students (teams).
- Development and discussion of cases.
- Participation of students.
- Preparation and presentation of a project (by team) that discusses and proposes an alternative that manages the concept of sustainable development.

http://serintel.org/training-methodology/

Wk.	Topics
1	Course presentation
2	Why sustainability
3	Non sustainable systems. Student Projects Presentations
4	Day off
5	Why societies collapse
6	Climate change
7	Social dimension: population
8	Economic dimensión: ecosystems services
9	Mid term exam. Project reports by students
10	Day off
11	Technology: guilt or solution
12	Design for sustainability: Life cycle analysis
13	Measuring sustainability. Green energy
14	Sustainable consumption
15	Our impact on the planet: ecological and water footprint
16	Student final Project presentations

Pop quizzes



Because we want to help you to be up-to-date with your Reading material, we will have pop-quizzes during the semester.

The quizzes will include the reading material for the week and perhaps previous weeks.

Please download the Socrative (student) program in your computers/tablets.

The quizzes will take place at the begining of the class and will last 8-10 min.

There will be a quick feedback.

https://blog.peerinstruction.net/2016/01/25/how-to-flip-your-class-with-quizzes-in-5-steps/

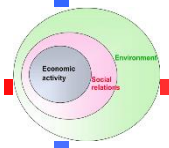
Weekly news

The last 15 min of the class will be devoted to discuss, analyze some current news that each team will upload in the discussion board of the week.

During the week, each team must discuss any topic related to Sustainable Development and write a small summary (half-page) that will be presented during the last 15 min of the class.

The professors will select the team and it should be uploaded the previous friday to the class.

https://stories.flipkart.com/flipkart-news-mar-31/weekly-news-update-2/



Organization for final project

The students will be organize by teams* of 3 (minimum) to 4 (maximum) people. The work team will develop the following activities:

1. Discussion and report of assigned activities.
2. Research and preparation of final project.

- The work teams will develop a final project that addresses the problem of sustainable development and its relationship with its current environment (academic activities, work in the industry, social and economical alternatives, etc.).
- Proposals: students team's will submit a presentation of their proposals and present it to the class on feb-28th. 10 min per team.
- Preliminary presentation of the project report on mar 11th. 10 min per team.
- Final project presentation on may 6th. 15 min per team.

* Teams MUST be approved by teachers to ensure professional diversity

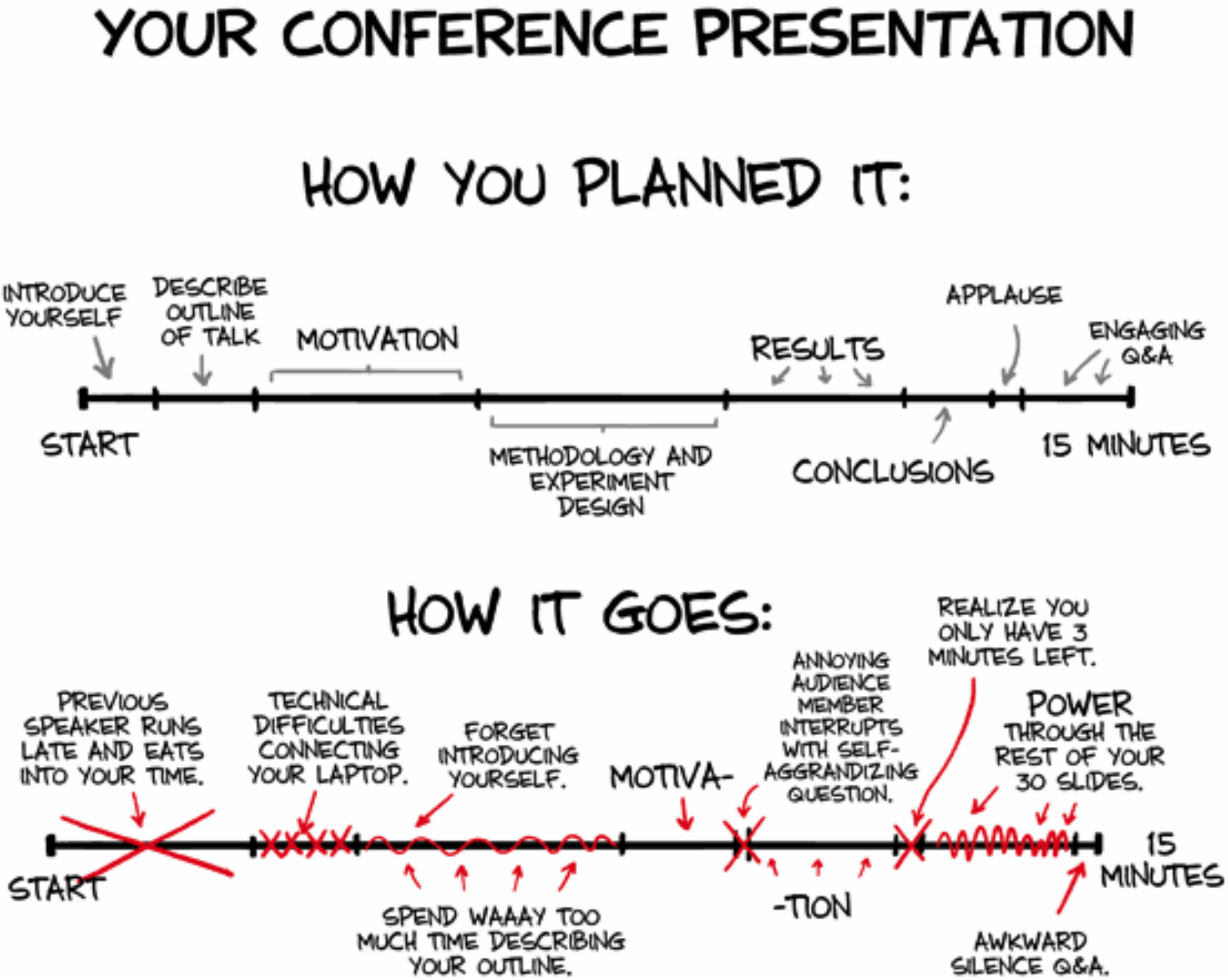
Project proposal

Must include the following items:

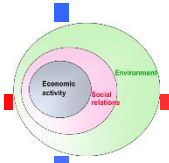
1. Title and team members
2. Problem background
3. Objective(s)
4. Expected results

https://conbizresources.com/project-proposal-structure-leads-to-project-success/

Avoid this in your presentations



https://www.slideshare.net/MUHAMMADHUZAIFACHAUD/paper-to-talk-original



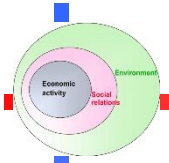
Evaluation

Midterm exam*	30%
Final project	40%
Homework's, Quizzes, etc.	20%
Participation	10%
TOTAL	100%

Students must obtain at least 70% of the total credits to pass this course.

Sorry a 69.9999 will not be rounded up to 70.

* Lectures, Reading material and Activities



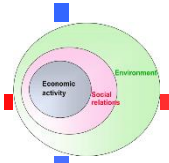
Code of ethics…

I declare that I will maintain the highest standards in academic integrity, therefore,the answers in my exams, quizes and my homework will be my soley responsability and the product of my own effort and knowledge. I will not carry any act that attempts to the academic integrity of mine or my classmates as the use of unauthorized materials in any assigment, quiz or exams.

I know the consecuences of breaking the academic integrity as they are documented in the Reglamento General de Alumnos.

I accepts the terms written above.

http://www2.ccm.itesm.mx/reglamentos/archivos/reglamentoprofesionalago07.pdf



Consecuences of breaking the C of E

- They accumulate in the cardex.
- Loos the right to get Honors.
- Will prevent an academic Exchange through ITESM.
- Will prevent public appointments at the University or Government levels.
- Three notes in your cardex, will be cause of expulsion from the Sistema Tec.

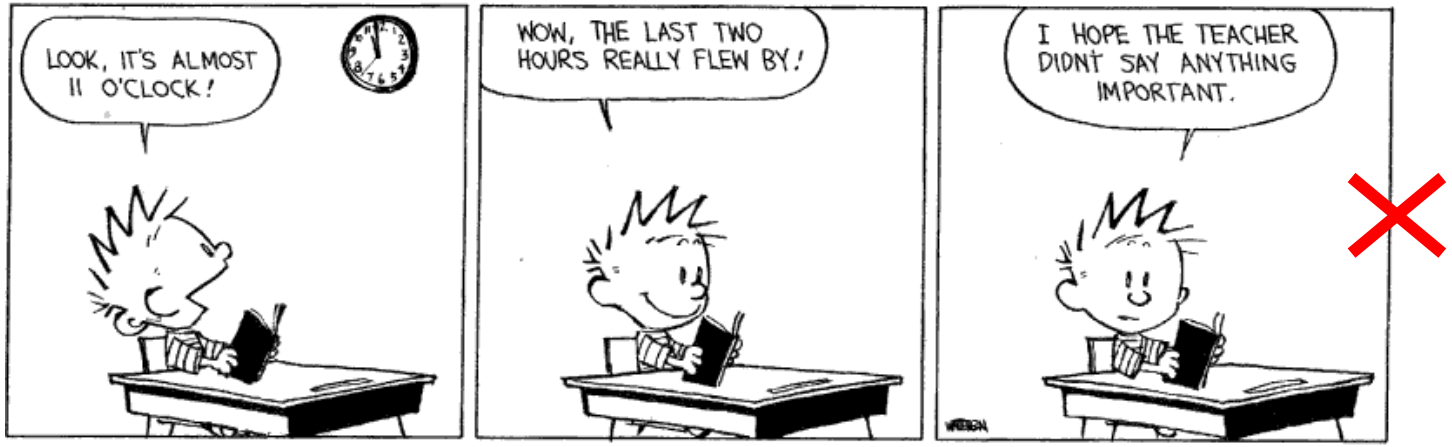
Important notes

Each student must bring to class a personal computer or tablet in order to participate and solve quizzes.

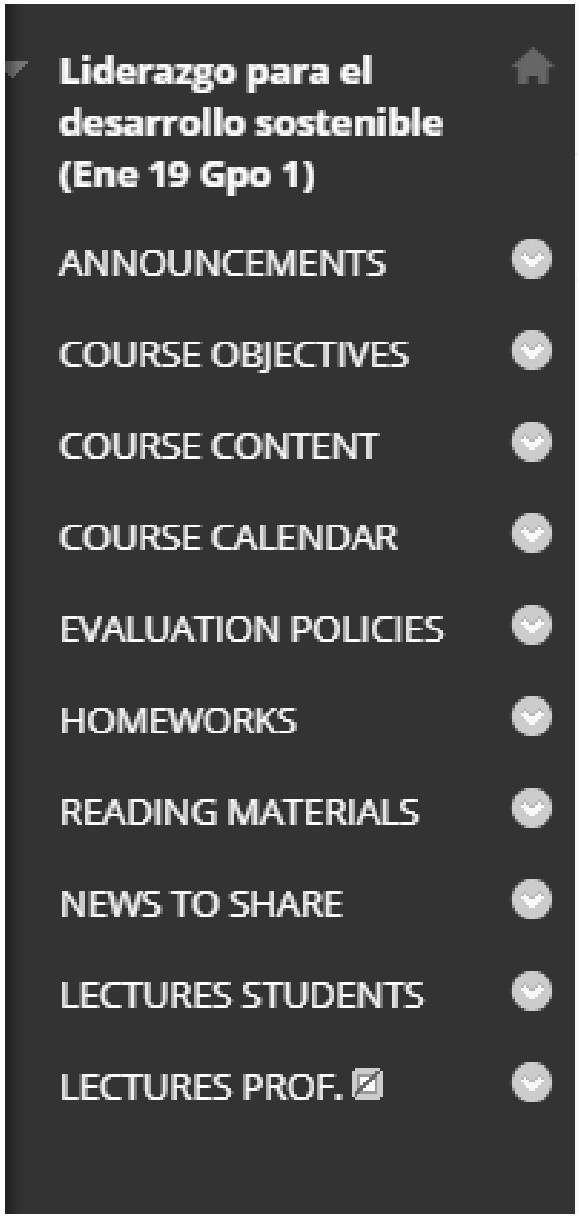
Please download the program *Socrative.com* (for students).

Important notes

- Discipline is your own responsability.
- You must pay attention to lectures and classmates participation and discussions within an environment of respect and tolerance.



Course in BB


Liderazgo para el desarrollo sostenible (Ene 19 Gpo 1)
ANNOUNCEMENTS
COURSE OBJECTIVES
COURSE CONTENT
COURSE CALENDAR
EVALUATION POLICIES
HOMEWORKS
READING MATERIALS
NEWS TO SHARE
LECTURES STUDENTS
LECTURES PROF.

Calendar, Activities, Reading material

SUSTAINABLE DEVELOPMENT - CALENDAR SPRING 2019

JANUARY

Wk.	MONDAY	Activities	Reading material
1	**14** **Presentation of teachers/students** **Course objectives, policies and calendar**	Quliz: State of the world in numbers (in class)	
2	**21** **Why sustainability**	VIDEO: TED-conference, Ray Anderson: The business logic of sustainability https://www.ted.com/talks/ray_anderson_on_the_business_logic_of_sustainability Watch video and write an essay. Upload it in: BB HOMEWORK: Ray Anderson, Essay	1. Sustainability a view from IEEE president. Gordon Ray. 2. Sustainable Development. Strange and Bayley. CHAPTER 2 ONLY.
3	**28** **Non-sustainable systems** **Presentation of Project proposals. (10 min/team)**	Read the document of Planetary boundaries, discuss it with your team and write an essay of one page max. Upload in the secction BB: HOMEWORK: Planetary boundaries.	1.Planetary boundaries: Exploring the Salfe Operating Space for Humanity