

SOS 498/SOS 594:
Sustainable Development in Action
(Wednesday 6:00 PM - 8:45 PM in MUSIC E275)

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Introduction:

This course is designed to build the bridge between academic and practice-oriented skills needed to address sustainability challenges in the developing world. It takes a problem driven, culturally sensitive, and solution oriented approach to these challenges. Students will be engaged with international development researchers and practitioners to better understand the complexity and inter-connectedness of local to global development challenges, get exposed to the international development landscape (key actors, organizations, and institutions), and derive lessons for context specific solution pathways and transitions. Teams of graduate and senior undergraduate students will get the opportunity to work in collaboration with international partners on project design, monitoring, and assessment. In doing so, students will be a part of efforts that can potentially make a real and positive change in the life of people, particularly those who are marginalized.

The final products will include:

- a) co-design of toolkits with international partners for engaging different stakeholders, mapping the complexity of the underlying sustainability problem, system, exploring innovative solution pathways, and assessing alternative solutions (based on gender, poverty, health, and financial indicators);
- b) plan of action for addressing a specific sustainable development challenge –specifically, in the areas of food, poverty, energy, water and waste management - through engagement with international researchers and practitioners.

Learning objectives:

The purpose of the course is to develop real world problem-solving skills through the analysis and diagnosis of complex development challenges. Specifically, the course will focus on building the analytical, normative and practice oriented skills needed to address these challenges.

Analytical skills:

- Understand the multidimensional and cross-scalar nature of international development and sustainability challenges.
- Develop the analytical capacity and tools to apply to those challenges.
- Be competent in applying system perspective and quantitative decision analysis in generating and selecting solutions

- Become critical thinkers of the development process and its implications.

Normative skills:

- Develop understanding of the multiple values, motivations and aspirations that underlie development.
- Develop understanding of the socio-cultural and economic context within which actions/solutions will be implemented.
- Acquire skills to critically examine the tradeoffs and ethical considerations that underlie development actions, policies, and processes.
- Become proficient in application of tools of monitoring and assessment of development and sustainability projects and policies.

Practice oriented skills:

- Bridge scholarship and practice in the field of international development and sustainability.
- Team building and collaborative skills.
- Learn to communicate multi-dimensional development problems (such as poverty; food, water and energy security; and climate vulnerability) across disciplinary boundaries, and diverse practitioner communities and cultures.
- Collaborate with relevant practitioners and stakeholders in the design, planning, and assessment of development interventions.

After successfully completing this course, you will have:

1. Applied theories and principles learned in the classroom to specific sustainability challenges in the developing world.
2. Built competency on designing coupled natural-human-technological systems using the UN Sustainable Development Goals (SDGs) framework as a focus and context.
3. Gained experience in designing a project plan for addressing a real development challenge.
4. Interacted with a range of international development researchers and practitioners, and start building networks.
5. Reflected on your own values, perceptions and professional development related to future work in the field of international development and sustainability..
6. Created the beginnings of a professional portfolio to help you when you begin to look for Study Abroad programs, international internship opportunities, and jobs.

Class structure and expectations: This is a workshop course, wherein, after an initial background in basic concepts and tools, the focus will be on **applications** to real problems. These applications will be developed in teams, and through engagement with international researchers and practitioners. The applications will be largely driven by student interest and initiative. This means that **you will be expected to participate in a much more proactive way than is generally expected in lecture based courses**. The instructor's role will be largely in advisory and supervisory capacity. You will be given specific responsibilities for the team assignments and project. Part of the final grade for the course will be based on the execution of those responsibilities. In addition, you are expected to actively participate in class and on our Blackboard discussion boards. **Thus attendance is mandatory if you want to be successful.** Formal attendance will not be taken, but not attending class will impact your performance. It is your responsibility to communicate with me in advance if you need to miss class.

A set of required and optional readings will be posted on the Blackboard site (or google folder) about a week in advance for nearly all class sessions. You will be required to comment/reflect on these readings and the work of your peers on a regular basis. Since class time is limited we will often carry our discussions over the

Discussion Board on Blackboard site. **Given different time zones, you will often be required to engage with international partners (through Skype/Whatsapp calls) outside the regular class times.**

As mentioned above, the final course products will include design of tool kits and a proposed plan of action for addressing a specific sustainable development challenge through engagement of international researchers and practitioners. The process of working towards this final product is just as important, if not more, than the product itself. Thus several short written assignments (around 1-3 pages) will be regularly assigned to give you the opportunity to work on different pieces of the final product and get feedback. Most of these assignments will be team based. You may submit a late written assignment for up to **3 days** past the assignment deadline for half credit. After an assignment is 3 days late, no credit will be given. Expectations regarding these assignments and the grading rubric will be discussed by the end of second week of classes.

Grade Allocation

Participation in class discussions and activities: 10%

Weekly reflections: 10%

Quizzes: 15%

Written assignments: 25%

Final presentation/poster: 15%

Final products: 25%

(Detailed grading rubric will be put on the course website)

The letter grade will correspond with the following percentages achieved. All course requirements must be completed before a grade is assigned.

A+ 100 – 98 % (and exceptional active participation)

A 97.9 – 93 %

A- 92.9 – 90 %

B+ 89.9 – 87 %

B 86.9 – 83 %

B- 82.9 – 80 %

C+ 79.9 – 77 %

C 76.9 – 70 %

D 69.9 – 60 %

F Below 60 %

Instructional Resources

All readings, assignments, etc. will be found on the course Blackboard site. Important notices will be emailed directly to you. Please Note: Make sure that the email address that is in the ASU system for you is correct and that you check it often. We will be using the email addresses that are linked in Blackboard.

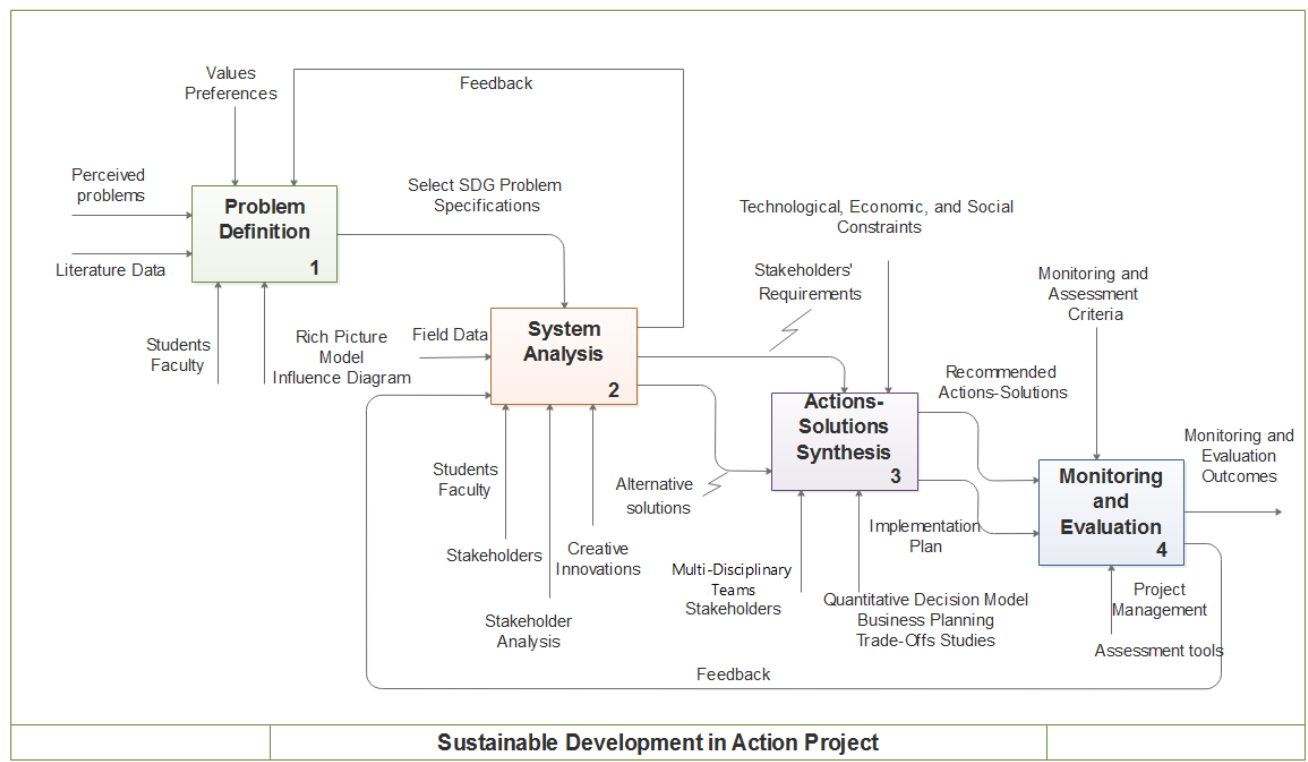
Academic Integrity: ASU expects and requires all its students to act with honesty and integrity and to respect the rights of others in carrying out all academic assignments. All necessary and appropriate sanctions will be issued to all parties involved with plagiarizing any coursework. The School of Sustainability does not tolerate any act of plagiarism or any other form of academic dishonesty that is in violation of the Student Code of Conduct. (See the Student Conduct Statement below)

Accommodations: Any student needing a course-related accommodation due to a circumstance documented with the Disability Resource Center must bring this to my attention within the first week of class so that learning needs can be addressed effectively. Students must document disability with the Disability Resource Center (<http://www.asu.edu/studentaffairs/ed/drc/>). Retroactive accommodations cannot be provided.

Student Conduct Statement: Students are required to adhere to the behavior standards listed in the Arizona Board of Regents Policy Manual Chapter V – Campus and Student Affairs: Code of Conduct (<https://azregents.asu.edu/rrc/Policy%20Manual/5-308-Student%20Code%20of%20Conduct.pdf>), ACD 125: Computer, Internet and Electronic Communications (<http://www.asu.edu/aad/manuals/acd/acd125.html>), and the ASU Student Academic Integrity Policy (<https://provost.asu.edu/index.php?q=academicintegrity>). Students are entitled to receive instruction free from interference by other members of the class. If a student is disruptive, an instructor may ask the student to stop the disruptive behavior and warn the student that such disruptive behavior can result in withdrawal from the course. An instructor may withdraw a student from a course when the student’s behavior disrupts the educational process under USI 201-10: <http://www.asu.edu/aad/manuals/ssm/ssm201-10.html> .

Course outline

In conducting the project the students will go through an iterative process involving four phases: problem definition, system analysis, actions-solutions synthesis, and monitoring and evaluation. The following flow diagram summarizes the whole process for the course project.



Weekly Course Schedule (tentative)

Date	Class Content
Week 1 Jan 10	Introduction <ul style="list-style-type: none"> • Course structure, logistics and expectations • What is International Development? How does sustainability qualify development? • Fact check: cross-checking our pre-conceptions with UN statistics • What are the main challenges faced by the world today?
Week 2 Jan 17	Inspiring creative thinking Guest Lectures <ul style="list-style-type: none"> • Andy Burnett, Founder and CEO, Know Innovation (KI) Introduction to international partners <ul style="list-style-type: none"> • Dr. Vijay Chariar, Professor IIT Delhi • Lalu Arifin Bakti, Faculty Univ. of Mataram
Jan 21	Milestone I - Engage with partners and familiarize yourself with all the project areas
Week 3 Jan 24	Evolution of development thinking and policy How has thinking of what “development” means shaped development policy and practice from the colonial era to present times. <ul style="list-style-type: none"> • Early growth theories –focus on capital accumulation and technology • Basic needs approach of 1970s • Debt crisis and structural adjustment policies of 1980s • Rethinking development - new theories and practice • Millennium Development Goals • Sustainable Development Goals
Week 4 Jan 31	Problem Formulation and System Analysis <ul style="list-style-type: none"> • Gap analysis • Mind tools/ Rich Picture • System mapping analysis
Jan 31	Milestone II - Project area selected
Week 5 Feb 7	Social entrepreneurship and disruptive innovation case studies Guest lectures: Mark Henderson, ASU Vijay Chariar, IIT Delhi
Week 6 Feb 14	Participatory research methods and engagement strategies
Week 7 Feb 21	Preparing a Monitoring and Evaluation Plan
Week 8 Feb 28	Design for Developing World <ul style="list-style-type: none"> - Design for affordability - House of Quality
Week 9 March 7	Spring break no class
Week 10 March 14	Project management and assessment tools <ul style="list-style-type: none"> • Logic model for project planning • Budget and business planning
March 19	Milestone III: Midterm report (including problem formulation and project plan)

Week 11 March 21	Group presentations on project progress and project plan
Week 12 March 28	Evaluation and selection of alternative actions/ solutions <ul style="list-style-type: none"> • Multi-criteria decision analysis • Pugh Trade-Offs Matrix
Week 13 April 4	Work on group projects
Week 14 April 11	Work on group projects
Week 15 April 18	Work on group projects
Week 16 April 25	Milestone IV: Final presentations and posters

Syllabus Disclaimer: The instructors reserve the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes in person, via email or through Blackboard. Please remember to check your ASU email and the course Announcements often.