CRSN 151B: Innovation & professionalization for sustainability designers, engineers & entrepreneurs

The goal of this 5 unit class is to teach students how to become innovators and entrepreneurs, develop projects and enterprises and learn professional practices, with a particular focus on sustainability for students in Sustainability Studies and especially in connection with students’ research and interests. Students build teams consisting of one or more students as entrepreneurial leads and a mentor with start-up experience that can help the students discover and develop a business model. They identify project audiences, clients and customers through application of the Business Model Canvas, and learn core project management, financial, legal, and marketing resources needed for new companies and to identify financing and other key resources. Students develop business plans; solicit participation from mentors; and prepare and submit funding proposals. There are no prerequisites for this course.

Course learning objectives:

1. Understanding of the organizational and practical foundations of designing a project, program or business, including needs and markets, mentoring and partnering, workplans, funding and proposal writing, human resources, evaluation.

2. Using the Business Model Canvas (BMC) to develop hypotheses and value propositions, identify audience/client/customer segments, and construct a project or enterprise plan.

3. Developing a business strategy to incubate the good or service and the capability of preparing business plans and polished funding proposals.

4. Learning professional skills appropriate to running a project or business, interacting with audiences, customers and clients, and developing presentation and speaking skills.

Course Requirements & grading

Students can expect to spend 3 hours in class, 2 hours of interviewing and outreach and 10 hours of homework per week.

Participation (5%): Regular attendance, participation in discussions and in-class work groups;

Weekly assignments (25%): Identification, research and planning for an individual or group project, including preparation of assigned materials, weekly revision of BMCs, a minimum of 50 audience/customer/client interviews; two in-class presentations;

Final presentation (20%): In-class presentations on projects & businesses
Final video (20%): Two minute videos on projects & businesses
Draft & final project or business plan (30%).

Reading:
Readings are available on the internet or course web site.

Recommended:


Additional resources:
Andrew Wolk & Kelley Kreitz, Business Planning for Enduring Social Impact, Root Cause, 2008, https://ecommons.ucsc.edu/x/AwZ1Yo


SEED (the other one): http://www.theseedcenter.org/About-SEED/Who-We-Are

Class schedule & readings

Week 1: Introduction to the course

Meeting #1: What are social & business enterprises?

Required reading:

Meeting #2: Identifying your project or business enterprise & student teams

Required reading:

Additional resources

Week 2: The Business Model Canvas (BMC)
Meeting #1: Understanding the BMC

Required reading:

Meeting #2: Applying the BMC

Required reading:

Week 3: Feasibility, demand, resources

Meeting #1: Assessing project or business feasibility & available resources

Required reading:
Don Hofstrand & Mary Holz-Clause, Iowa State Extension Feasibility Study, at: https://ecommons.ucsc.edu/x/gwkuEp; Mary Lewinson, “How to Write a Feasibility Study Report,” MyManagementGuide.com, 12/15/10, at: https://ecommons.ucsc.edu/x/Nl0Eaq; Eric McConnell, “Feasibility Study-A Quick Overview,” MyManagementGuide.com, 10/19/10, at: https://ecommons.ucsc.edu/x/XcyV1w; Anand Saxena & Seema Sodhi, “Feasibility analysis, project report and business plan,” at: https://ecommons.ucsc.edu/x/Xa1s8j

Meeting #2: Who is your market? What do they want? How can you serve them?

Required reading:
Week 4: Mentors, collaborators, partners

Meeting #1: Finding mentors

Required reading:
Susan E. Metros and Catherine Yang, “The Importance of Mentors,” at: https://ecommons.ucsc.edu/x/QWF6Dv

Meeting #2: Identifying collaborators & partners

Required reading:

Week 5: Workplans, goals, objectives

Meeting #1: Planning & design

Required reading:
10 Steps to Creating a Project Plan,” http://www.projecttimes.com/articles/10-steps-to-creating-a-project-plan.html; “Guide to Writing a Project Description,” University of Western Sydney, at: https://ecommons.ucsc.edu/x/y1WYxL
Daniel Linman, “How to Write a Project Description,” MyManagement Guide.com, 10/31/11, at: https://ecommons.ucsc.edu/x/1laAu7

Additional resources:
Small Business Administration, “How to write a business plan,” at: https://www.sba.gov/starting-business/write-your-business-plan

**Meeting #2: Goals, Objectives, Timelines**

**Required reading:**
Goals, Objectives & Performance Criteria, https://ecommons.ucsc.edu/x/xFyY1D

**Week 6: Costs, Revenues, Budgets**

**Meeting #1: Estimating costs & revenue flows**

**Required reading:**
“Marginal Cost & Revenue,” https://ecommons.ucsc.edu/x/YhulmR

**Meeting #2: Creating a budget**

**Required reading:**
MyMG Team, “How to Prepare a Project Budget in Three Generic Steps,” 12/26/11, at: https://ecommons.ucsc.edu/x/gtVT21

**Additional resources:**
Week 7: Networking, Grantwriting, Fundraising

Meeting #1: What do funders want?

Required reading:


Anna Vital, “How Startup Funding Works,” https://ecommons.ucsc.edu/x/Xa2Erg

Meeting #2: Grantwriting

Required reading:


Week 8: Communications, Pitches, Outreach

Meeting #1: Communicating your project or business

Required reading:
Meeting #2: Making pitches

Required reading:
Harvard Business School, “The Art of Pitchcraft,” at: https://ecommons.ucsc.edu/x/9dFHUH


Norma McGavern, “Public Speaking Tips,” at: https://ecommons.ucsc.edu/x/jxyGzP

Additional resources:

Week 9: How to make a video for your enterprise

Meeting #1: The role of storytelling

Required reading:


Meeting #2: Mechanics of video making
**Week 10: Evaluation & assessment**

**Meeting #1: Why evaluate?**

**Required reading:**
- Wellcome Trust, “Project Evaluation Guidelines,” [https://ecommons.ucsc.edu/x/WLhTCW](https://ecommons.ucsc.edu/x/WLhTCW)
- Michael Wells, articles on project evaluation, GrantsNorthwest, [https://ecommons.ucsc.edu/x/rvAr4f](https://ecommons.ucsc.edu/x/rvAr4f)
- Bruce Gjovig, “Checklist for evaluating new ideas and ventures,” Center for Innovation, Rural Tech Incubator, [https://ecommons.ucsc.edu/x/b6ghrd](https://ecommons.ucsc.edu/x/b6ghrd)

**Meeting #2: How to evaluate**

**Required reading:**
- StartUp Business Evaluation Form, [https://ecommons.ucsc.edu/x/ybAkwb](https://ecommons.ucsc.edu/x/ybAkwb)

**Additional resources:**

**Final period:** Teams will give presentations and show videos