

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:

Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company,
<https://ecommons.ucsc.edu/x/TH9f3C>

The Business Model Generation (Canvas): A Handbook for Visionaries, Game Changers, and Challengers,
<https://www.intec.edu.do/downloads/pdf/vriv/emprendurismo-innovacion/recursos/business-model-generation-a-handbook-for-visionaries-game-changers-and-challengers.pdf>

Marcus Wagner (ed.), *Entrepreneurship, Innovation and Sustainability* (Greenleaf, 2012),
<http://site.ebrary.com.oca.ucsc.edu/lib/ucsc/reader.action?docID=10650065&ppg=12>

Additional resources:

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

SEEDCO, *A Toolkit for Developing a Social Purpose Business Plan*, 2004,
<https://ecommons.ucsc.edu/x/GOq6Q3>

International Labour Organization, "Project Design Manual," Dar es Salaam, 2010, at:
http://www.ilo.org/empent/units/cooperatives/WCMS_159819/lang-en/index.htm

Steve Blank, "Startup Tools," at: <http://steveblank.com/tools-and-blogs-for-entrepreneurs/>

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

College Eight Wiki, "Entrepreneurship," at:
<http://www.ic.ucsc.edu/college8core/c8wiki/index.php/Category:Entrepreneurship>

Wikibooks, *Technology Planning: The Educator's Guide*,
https://en.wikibooks.org/wiki/Technology_Planning

Class schedule & readings

Week 1: Introduction to the course

Meeting #1: What are social & business enterprises?

Required reading:

Eric G. Olson, "Creating an enterprise-level 'green' strategy," *Journal of Business Strategy* 29, #2 (2008): 22-30, <https://ecommons.ucsc.edu/x/xYzH7F>; Glenn Bachman, "Attributes of a green enterprise," RI Business Plan Competition, 2010, <https://ecommons.ucsc.edu/x/nCpIRH>; US AID, "The Entrepreneurship Toolkit," Sept. 2011, <https://ecommons.ucsc.edu/x/GvDhjS>; Green for All, "The Green Business Plan Guide," n.d., <https://ecommons.ucsc.edu/x/IMKFwp>; Tim Brown & Jocelyn Wyatt, "Design Thinking for Social Innovation," *Stanford Social Innovation Review*, Winter 2010, <https://ecommons.ucsc.edu/x/4qpaKX>
Derk Loorbach & Katinka Wijsman, "Business transition management," *Journal of Cleaner Production* 45 (2013): 20-28, <https://ecommons.ucsc.edu/x/Qkw5bv>

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

Required reading:

Eleazer Hernandez, "Brainstorming," pp. 57-74, in: *Leading Creative Teams*, Apress, 2017, <https://ecommons.ucsc.edu/x/xOPyIT>; Kristal Johnson, "The Needs Assessment: Making the Connection between Data and the Nonprofit Story," *Journal of the Grant Professionals Association* 12, #1 (Fall 2014): 44-50, <https://ecommons.ucsc.edu/x/PF0OKx>; Soraya M. Coley & Cynthia A. Scheinberg, "Writing the Needs or Problem Statement," in: *Proposal Writing—Effective Grantsmanship*, Sage, 3rd ed., 2008, at: <https://ecommons.ucsc.edu/x/R1jMR7>
Steve Blank, "Why the Lean Start-up Changes Everything," *Harvard Business Review*, May 2013, <https://ecommons.ucsc.edu/x/SHZ3UP>; Aalborg University, "Handbook of Project Writing," 2005, <https://ecommons.ucsc.edu/x/8Uscnf>

Additional resources

Robin Murray, Geoff Mulgan & Julie Caulier-Grice, "How to Innovate: The tools for social innovation," NESTA/The Young Foundation, <https://ecommons.ucsc.edu/x/HExHdz>; Geoff Mulgan, "The Process of Social Innovation," *Innovations*, Spring 2006, 145-62, <https://ecommons.ucsc.edu/x/PFOmVa>

Week 2: The Business Model Canvas (BMC)

Meeting #1: Understanding the BMC

Required reading:

Ingrid Burkett, "Using the Business Model Canvas for Social Enterprise Design," Knode, <https://ecommons.ucsc.edu/x/xYzH7F>; Steve Blank, "The Mission Model Canvas - An Adapted Business Model Canvas for Mission-Driven Organizations," <https://steveblank.com/2016/02/23/the-mission-model-canvas-an-adapted-business-model-canvas-for-mission-driven-organizations/>

Meeting #2: Applying the BMC

Required reading:

Rita S.Y. Berry, "Collective data by in-depth interviewing," Paper presented at the British Educational Research Association Annual Conference, University of Sussex at Brighton, September 2 - 5 1999, <https://ecommons.ucsc.edu/x/cScMe>
Tom Sivén, "Applying Business Model Canvas in an Internal Project Funding Case: IB-HUB," BA thesis, Turku University, Finland, 2014, <https://ecommons.ucsc.edu/x/xl2cL6>

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:

Øyen, "A Methodological Approach to 'Best Practices'" <https://ecommons.ucsc.edu/x/7PS6JJ> ; Community Tool Box, "Promoting the Adoption & Use of Best Practices," at: <http://ctb.ku.edu/en/table-of-contents/analyze/choose-and-adapt-community-interventions/using-best-practices/main>
Anastasia, "Business model canvas: Customer segments," Cleverism, Feb. 16, 2015, <https://www.cleverism.com/customer-segments-business-model-canvas/>

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>

Wall Street Journal, "Finding a Mentor," *Wall Street Journal*, May 20, 2013, at:

<https://ecommons.ucsc.edu/x/1QdyQh>

Meeting #2: Identifying collaborators & partners

Required reading:

Healthy Teen Network, "Best Practices for Community Engagement: Tip Sheet," 2011,

<https://ecommons.ucsc.edu/x/aPA8nT>

Sarah Flicker, Kirsten Senturia and Kristine Wong, "Developing a CBPR Partnership - Getting Started," <https://ecommons.ucsc.edu/x/LVnjrJ>

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>

Business Plan for Small Business, 2009, <https://ecommons.ucsc.edu/x/tLdz53>

MyOwnBusiness, "The Business Plan," <https://ecommons.ucsc.edu/x/RPSAxN>

Additional resources:

Columbia University, "Project & Organizational Development for NGOs and CBOs--A Handbook," Institute for Human Rights, n.d., <https://ecommons.ucsc.edu/x/9oCLKQ>

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>

Project SITE, “Defining Goals and Objectives,” 2012,

<https://ecommons.ucsc.edu/x/8TDWQs>

“Basics of Project Planning,”

http://zilicus.com/Articles/Basics_Of_Project_Planning.pdf

“Critical Path Concepts,”

http://www.luc.edu/media/lucedu/pmo/pdfs/additionalreading/Critical_Path_concepts.pdf

W. Durfee, “Project planning and Gantt charts,” 2008,

http://www.me.umn.edu/courses/me2011/handouts/proj_planning.pdf

Week 6: Costs, Revenues, Budgets

Meeting #1: Estimating costs & revenue flows

Required reading:

Glenn Barnes, “Understanding Costs & Revenues,” Dept. Of Energy Better Buildings Workshop, Oct. 26, 2011, <https://ecommons.ucsc.edu/x/XqSnHs>

“Marginal Cost & Revenue,” <https://ecommons.ucsc.edu/x/YhulmR>

S. Carter, N.J. Macdonald, D.C.B. Cheng, “Information for decision making” (ch. 5), in: *Basic Finance for Marketers* (Rome, FAO, 1997),

<http://www.fao.org/docrep/W4343E/W4343E00.htm#Contents>

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>

John Cammack, “Project budgeting: how to guide,” BOND, 2010,

<https://ecommons.ucsc.edu/x/b09GAD>

Additional resources:

International Budget Project, “A Guide to Budget Work for NGOs,” Center on Budget & Policy Priorities, 2001, <https://ecommons.ucsc.edu/x/jRRTJH>

Week 7: Networking, Grantwriting, Fundraising

Meeting #1: What do funders want?

Required reading:

Robin Toal, “What do funders look for in a grantee?” Oct. 10, 2013, at: <http://www.fundsforngos.org/free-resources-for-ngos/funders-grantee/>

Robin Toal, “Don’t just write, call your potential funder!” Oct. 14, 2013, <https://www.fundsforngos.org/free-resources-for-ngos/dont-write-call-potential-funder/>

Rebecca Lake, “Angel Investing vs. Crowdfunding,” Investopedia, Jan.4, 2016, <http://www.investopedia.com/articles/investing/010416/angel-investing-vs-crowdfunding-how-raise-money-your-startup.asp>

Centus Law, “Seed Funding & Series A Rounds--Raising Capital for Startups, Part 1, Austin, Tx, <http://www.businessattorneyinaustin.com/2016/10/raising-capital-startups-seed-series-a-funding/>

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

Meeting #2: Grantwriting

Required reading:

Padraic Brick, et al, “Granting Success--Lessons from funders and charities,” New Philanthropy Capital, Jan. 2009, <https://ecommons.ucsc.edu/x/BCCmrT>

Advocates for Youth, “How to Write Proposals that Get Funded,” 1990, <https://ecommons.ucsc.edu/x/LRve6P>

Besim Nebiu, “Project Proposal Writing,” Regional Environmental Center, 2002, <https://ecommons.ucsc.edu/x/bxLQLq>

Week 8: Communications, Pitches, Outreach

Meeting #1: Communicating your project or business

Required reading:

Michael J. Swenson, Gary K. Rhoads & David B. Whitlark, "Startup Marketing: Leveraging Leverage," *Journal of Applied Business & Economics*, 16, #6 (2014): 55-62, <https://ecommons.ucsc.edu/x/ztqQFk>

Casey J. Frid, Imran Chowhury & Claudia G. Green, "An Experiential Field Study in Social Entrepreneurship," *Journal of Business Ethics Education* 13 (2016): 1-21, <https://ecommons.ucsc.edu/x/MGOdoD>

Meeting #2: Making pitches

Required reading:

Harvard Business School, "The Art of Pitchcraft," at:

<https://ecommons.ucsc.edu/x/9dFHUH>

Jerome A. Katz & Richard P. Green, "The Elevator Pitch," in: *Entrepreneurial Small Business* (McGraw-Hill, 2013), at: <https://ecommons.ucsc.edu/x/3wkkN1>

Norma McGavern, "Public Speaking Tips," at: <https://ecommons.ucsc.edu/x/jxyGzP>

Eleazer Hernandez, "The Art of the Pitch," pp. 105-27, in: *Leading Creative Teams*, Apress, 2017, <https://ecommons.ucsc.edu/x/0i92kd>

Additional resources:

Melanie Milovac & Jeffrey Sanchez-Burks, "Positivity makes for poor pitches: Affective tone conveyed by entrepreneurs shapes support for creative ideas," *Academy of Management Proceedings* (2014):777-82, <https://ecommons.ucsc.edu/x/Xep89M>

Week 9: How to make a video for your enterprise

Meeting #1: The role of storytelling

Required reading:

Rockefeller Foundation, "Digital Storytelling for Social Impact," 2014,

<https://ecommons.ucsc.edu/x/JJX1PP>

Daveed Gartenstein-Ross & Nathaniel Barr, "The Lean Terrorist Cell: How Startup Companies and Violent Non-State Actors Are Changing the Old World Order,"

Georgetown Journal of International Affairs 17, #2 (Summer/Fall 2016): 31-38,

<https://ecommons.ucsc.edu/x/SNQV3z>

Tina Maund, "Video-Storytelling: a Step-by-Step Guide," *Joint Commission Journal on Quality and Safety* 29, #3 (March 2003): 152-55, <https://ecommons.ucsc.edu/x/46lgEG>

Ashoka Changemakers, "A Changemaker's Eight-Step Guide to Storytelling," Fall 2013, <https://ecommons.ucsc.edu/x/PqkmJx>

John Rampton, "The Ultimate Guide to Startup Content Marketing," *Forbes* June 8, 2016, <https://ecommons.ucsc.edu/x/vvmSqb>

Meeting #2: Mechanics of video making

Required reading:

Jodi Harris, "23 Things to Consider When Creating Video Content," Content Marketing Institute, April 12, 2016, at: <https://ecommons.ucsc.edu/x/CX33gV>

Digital Marketing Institute, "How to Create Outstanding Video on a Budget," <https://ecommons.ucsc.edu/x/y1yGAg>

Microsoft, "Turn your powerpoint presentations into video," <https://ecommons.ucsc.edu/x/SnavGI>

John Nemo, "How to Create Awesome Online Videos," SocialMedia Examiner, Jun 24, 2014, <https://ecommons.ucsc.edu/x/l8d1Ce>

Week 10: Evaluation & assessment**Meeting #1: Why evaluate?****Required reading:**

Wellcome Trust, "Project Evaluation Guidelines," <https://ecommons.ucsc.edu/x/WLhTCW>

Michael Wells, articles on project evaluation, GrantsNorthwest, <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>

Meeting #2: How to evaluate**Required reading:**

Joy Frechtling Westat, et al., "The 2010 User-Friendly Handbook for Project Evaluation," National Science Foundation. December, ch. 1-3, at: <https://ecommons.ucsc.edu/x/SXp6YT>

Fataneh Zarinpoush, "Project Evaluation Guide for Nonprofit Organizations," Toronto, Imagine Canada, 2006, at: <https://ecommons.ucsc.edu/x/TeutiA>

StartUp Business Evaluation Form, <https://ecommons.ucsc.edu/x/ybAkwb>

Additional resources:

National Research Center & Community Food Security Coalition, *Community Food Project Evaluation Handbook*, USDA Community Food Projects Program, 2006, 3rd ed., <https://ecommons.ucsc.edu/x/iC1eHR>

Final period: Teams will give presentations and show videos