CRD 241, 4 units M. Kenney Office: 2307 Hart Hall Office Hours: By appointment Dept. of Human and Community Development University of California, Davis Office tele. # 752-0328 mfkenney@ucdavis.edu

CRD 241 The Economics of Community Development Course objectives

This is a practicuum class as it revolves around practical research that could be of use to a local government, namely researching entrepreneurial clusters. You will be working in teams that will actually undertake the research. From the 2005 class, the entire Madison, WI team was invited and went to the University of Wisconsin, Madison to do research and present their findings at the business school. Amy Nelson did her Master's thesis on Madison and co-wrote a paper for the Paris-based Organization for Economic Cooperation and Development. Another student in the class Jessica Mullan wrote her Master's thesis with me on a contract with the InterAmerican Development Bank. The UC Davis map was posted on the UC Davis CONNECT website and was presented at the Davis City Council in December 2007. Finally, the 2009 class prepared a paper that has now been submitted to the top geography journal, the *Journal of Economic Geography*.

This class can become a building block for your future or be treated as a fun class where you will learn more about how entrepreneurship, one of the fundamental forces in the capitalist economy, can transform regions. We will work together and discuss your work as we go along. The class is small, but this is an opportunity for you to work closely with a faculty member. Because of the small size, I have chosen three possible research locations.

- 1) An examination of the coherence of U.S. Greentech clusters through an analysis of all Greentech firms that have been funded by venture capitalists.
- 2) Alexander Valley, which is trying to establish a wine industry cluster
- 3) A Greentech Cluster in the Sacramento region?

The goal of this class is to understand the networks allowing regions to encourage entrepreneurship and economic change. The emphasis on using entrepreneurship to spearhead regional development is fairly recent and has increased dramatically in the last five years. The reason for this is that "smokestack chasing" and retail development has become increasingly expensive, and the results have been disappointing. Given increased globalization, communities in developed nations are finding that they must compete against regions in developing nations that can offer cost advantages that are simply overwhelming. Alternatively, communities in developing nations have recognized that entrepreneurship provides the possibility of not becoming entirely dominated by multinational firms. Also, in this period of relatively tight budgets encouraging local entrepreneurship appears to be far more effective than multimillion dollar subsidies and obsequiousness to the large firms that is part and parcel of smokestack chasing and retail development.

There is ample literature indicating that entrepreneurship and the growth of regional clusters are intimately related, i.e., at least, during its initial formation stage clusters are based upon entrepreneurs, and even waves of entrepreneurs that create new firms. However, entrepreneurship does not occur in a vacuum. The entrepreneur must mobilize people, organizations, markets, and resources to support their fledgling venture. Some of the most important of these organizations are law firms, financiers (venture capitalists or business angels), advertising and marketing firms, and accountants, to name only the most prominent. Taken together these might be called entrepreneurial support networks, and these can form in regions where there is an adequate level of entrepreneurial activity. Despite the recognition of the importance of these actors, there has been little research on their location and activities.

This quarter we will be reading and researching entrepreneurship and the support networks in situ. Understanding entrepreneurship is of vital importance to economic development directors and others interested in boot strapping their region. Our task this quarter is to develop a better understanding of local entrepreneurship. The aim of our work is to create knowledge that will be of value to local persons interested in economic development.

Class Organization

The class meets once a week. During the first half of class we will discuss the readings and in the second half each group will describe what it accomplished during the week, its plans for the next week, and any obstacles or new ideas it had during the week.

Required reading

Readings are an essential part of the course and are a necessary background for discussion. I have deliberately limited the readings this quarter to provide you with more time for the research portion. If you are interested in any of the topics specifically, I have provided further readings and/or the names of significant contributors to these areas. Many of the authors of the articles you are reading have also authored other important papers on similar topics and a Google search will provide you with still more material.

Course requirements

The course grade will be based upon a system partly to be determined by the second week of class in discussion with you:

Participation10%Midterm Progress Report 30%60%

Participation: Participation is an integral aspect of the class because we will be discussing your projects, accomplishments and theoretical gains. All students will have to contribute to make this work. You are also expected to have cogent and coherent comments on the assigned reading because of the importance of the readings to the project.

Midterm Progress Report: This will be an update on the progress you have made. You will make a 15minute presentation concerning the tasks and accomplishments of each group member. In the presentation, you will reflect upon what you have learned and how this correlates with your readings.

Final paper: This will be the core of the grading. Each student will write a paper integrating the readings with what they have learned from the research project. The paper will have three major components:

- 1) The effective use of the readings to think through the genesis, role and operation of clusters and the development and importance of local entrepreneurial support networks. Here, it will be important to consider the role of local jurisdictions, non-governmental players such as regional entrepreneurship advocacy organization, and non-politician civic leader (s).
- 2) The integration of what you learned from the research experience that can shed light on issues raised in the readings. For example, in the case of the region I studied the local university president catalyzed the formation of the industry by these actions, even while local government seemed entirely unaware of this budding formation etc. Here, the readings and your local learning are integrated.
- 3) An appendix reflecting upon the research process, what you found effective, what should have been done differently, and how the assignment/class should have been structured differently to provide you with better support etc.

Class Presentations: In the final regularly scheduled class session, each group will make an in-class presentation of approximately 60 minutes on their research. This is ungraded, but is a very important part of the class because you can discuss your work with all of us.

Class Meetings and Readings

1. Monday, September 27 – Welcome and Introduction

Discussion of the class, forming teams, choosing locations.

Slide show on the previous research accomplishments. Articles from previous class efforts:

Beebe, Craig, Farshid Haque, Chelsea Jarvis, Martin Kenney*, and Donald Patton. 2010. "Still the Vine Her Ancient Ruby Yields: Identity Creation and Cluster Construction in the Paso Robles Wine Region." Unpublished paper submitted to the *Journal of Economic Geography*.

Kenney, M., A. Nelson, and D. Patton. 2009. "The University-centric High-tech Cluster of Madison, United States." In J. Potter and G. Miranda (Eds.) *Clusters, Innovation and Entrepreneurship* (Paris: OECD) pp. 167-192.

2. Monday, October 4 – State of the Art on Topics of Study

Cooke, Philip. 2008. "Cleantech and an Analysis of the Platform Nature of Life Sciences: Further Reflections upon Platform Policies." *European Planning Studies* 16 (3): 375-393.

Kenney, Martin. 2009. "Venture Capital Investment in the Greentech Industries: A Provocative Essay." Forthcoming in the *Handbook of Research on Energy Entrepreneurship* edited by Rolf Wüstenhagen and Robert Wuebker, published by Edward Elgar Publishing,

McDermott, Gerald. 2007. "The Politics of Institutional Renovation and Economic Upgrading: Recombining the Vines that Bind in Argentina." *Politics and Society* 35 (1): 103-143.

Molotch, Harvey. 2002. "Place in Product." *International Journal of Urban and Regional Research* 26 (4): 665–88.

Santagata, W. 2002. Cultural Districts, Property Rights and Sustainable Economic Growth. *International Journal of Urban and Regional Research* 26: 9-23.

Scott, Allen J. 2004. "Cultural-Products Industries and Urban Economic Development: Prospects for Growth and Market Contestation in Global Context" *Urban Affairs Review* 39 (4): 461-490.

3. Monday, October 11 -- Networks, Hierarchies, and Markets

Powell, W. 1990. "Neither Market nor Hierarchy: Network Forms of Organization." *Research in* Organizational Behavior 12:295-336.

Coase, R. H. 1937. "The Nature of the Firm." *Economica* 4 (16): 386-405.

Williamson, O. E. 1981. "The Economics of Organization: The Transaction Cost Approach." *The American Journal of Sociology* 87 (3): 548-577.

Ankarloo, D. and G. Palermo. 2004. "Anti-Williamson: a Marxian critique of New Institutional Economics." *Cambridge Journal of Economics* 28:413-429.

4. Monday, October 18 - Social Capital and Sociology

Putnam, R. 1993. *Making Democracy Work* (Princeton: Princeton University Press) pp. 163-186. (not on class website)

Portes, Alejandro. 1998. "Social Capital: Its Origins and Applications in Modern Sociology." Annual Review of Sociology 24.

Granovetter, M. 1985. "Economic Action and Social Structure: The Problem of Embeddedness." *American Journal of Sociology* 91: 481-510.

Cohen, S. and G. Fields. 2000. "Social Capital and Capital Gains: An Examination of Social Capital in Silicon Valley." In M. Kenney (ed.) *Understanding Silicon Valley: Anatomy of an Innovative Region* pp. 190-217.

OPTIONAL

Uzzi, B. 1999. "Embeddedness in the Making of Financial Capital: How Social Relations and Networks Benefit Firms Seeking Financing." *American Sociological Review* 64 (4): 481-505.

Westlund, H. and R. Bolton. 2003. "Local Social Capital and Entrepreneurship." *Small Business Economics* 21: 77–113.

Sydow, J and U. Staber. 2002. "The institutional embeddedness of project networks: The case of content production in German television." *Regional Studies* 36 (3): 215-227.

5. Monday, October 25 – Clusters and Entrepreneurship

Marshall, A. 1890. *Principles of Economics* Book Four: The Agents of Production Land, Labour, and Capital and Organization Chapters 10 (Please be aware of this site http://www.marxists.org).

Porter, M. 1998. "Clusters and the New Economics of Competition." *Harvard Business Review* (November-December): 77-90.

Feldman, M. P., J. Francis, and J. Bercovitz. 2005. "Creating a Cluster While Building a Firm: Entrepreneurs and the Formation of Industrial Clusters." *Regional Studies* 39, (1): 129-141.

Thornton, P. H. 1999. "The Sociology of Entrepreneurship." Annual Review of Sociology 25: 19-46.

Klepper, S. 2001. "Employee startups in high tech industries." *Industrial and Corporate Change* 10: 639–674.

6. Monday, November 1 -- Innovative Clusters

Lamoreaux, N. and M. Levenstein. 2008. "The Decline of an Innovative Region: Cleveland, Ohio, in the Twentieth Century." Prepared for the 2008 Annual Meeting of the Economic History Association

Brown, J. S. and P. Duguid. 2000. "Mysteries of the Region: Knowledge Dynamics in Silicon Valley." In C. Lee et. al. (eds.) *The Silicon Valley Edge* (Stanford: Stanford University Press): 16-45.

Pinch, S, Henry, N, Jenkins, M. and Tallman, S. 2003. "From 'industrial districts' to 'knowledge clusters': a model of knowledge dissemination and competitive advantage in industrial agglomerations." *Journal of Economic Geography* 3 (4), 373-388.

Almeida, P. and B. Kogut. 1999. "Localization of Knowledge and the Mobility of Engineers in Regional Networks." *Management Science* 45, (7): 905-917.

Castilla, E. J., H. Hwang, E. Granovetter, and M. Granovetter. 2000. "Social Networks in Silicon Valley." *The Silicon Valley Edge: A Habitat for Innovation and Entrepreneurship* C.M. Lee, W.F. Miller, H. Rowen, and M. Hancock, eds., (Stanford: Stanford University Press): 218-247.

OPTIONAL: There is an enormous literature on this. For example, see the numerous articles in *World Development, Economic Geography*, and *Regional Science* in the last decade. More recently, business journals such as *Organization Science* have also begun to contribute to this discussion. For example, biotechnology has attracted innumerable studies of its networks and geography. Important authors in this area include but are not limited to, in alphabetical order: Maryann Feldman, Maureen McKelvey, Jason Owen-Smith, and Walter Powell.

Nadvi, K. and G. Halder. 2002. "Local clusters in global value chains: exploring dynamic linkages between Germany and Pakistan." IDS Working Paper 152, Brighton: Institute of Development Studies, University of Sussex.

Sorenson, O. and P. G. Audia 2000. "The Social Structure of Entrepreneurial Activity: Geographic Concentration of Footwear Production in the United States, 1940–1989." *American Journal of Sociology* 106, (2): 424–62.

Cooke, P. 2004. "The molecular biology revolution and the rise of bioscience megacentres in North America and Europe." *Environment and Planning C: Government and Policy* **22** (2) 161 – 177.

Zucker, L. G., Darby, M. R., and Brewer, M. B. 1998. "Intellectual Human Capital and the Birth of U.S. Biotechnology Enterprises." *American Economic Review* 88 (1): 290-306.

Kenney, M. (ed.) 2001. Understanding Silicon Valley (Stanford: Stanford University Press).

McKendrick, D. G. 2004. "Leveraging Locations: Hard Disk Drive Producers in International Competition." In *Locating Global Advantage* M. Kenney (ed.) (Stanford: Stanford University Press). pp. 142-174.

7. Monday, November 8 -- Clusters Understood Co-evolutionarily

Aldrich, H., and Fiol, M. 1994, Fools rush in? The institutional context of industry creation. *Academy of Management Review* 19 (4): 645-670.

Shane, S., and Cable, D. 2002. Network ties, reputation, and the financing of new ventures. *Management Science*, 48 (3): 364-381.

Chiles, T. H., A. D. Meyer, and T. J. Hench. 2004. "Organizational Emergence: The Origin and Transformation of Branson, Missouri's Musical Theaters." *Organization Science* 15 (5): 499–519.

8. Monday, November 16 - Clusters as Knowledge Centers

Bathelt, H., A. Malmberg and P. Maskell. 2004. "Clusters and Knowledge: Local Buzz, Global Pipelines and the Process of Knowledge Creation." *Progress in Human Geography* 28 (1): 31-56.

Maskell, P. 2001. "Towards a Knowledge-based Theory of the Geographical Cluster." *Industrial and Corporate Change* 10 (4): 921-943.

Gertler, M. S. 2003. "Tacit Knowledge and the Economic Geography of Context, or The Undefinable Tacitness of Being (There)." *Journal of Economic Geography* 3: 75-99.

Florida, Richard. 1994. "Toward the Learning Region." Futures, 27 (5): 527-536.

OPTIONAL: Key authors in cluster studies not assigned include Allen Scott and Michael Storper

Jaffe, A. B., M. Trajtenberg, and R. Henderson. 1993. "Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations." *Quarterly Journal of Economics*, 108: 577-598. (Do not worry about the statistical analysis just read the theory and discussion parts).

9. Monday, November 23 - Cluster Support Institutions

Kenney, M. and D. Patton. 2005. "Entrepreneurial Geographies: Support Networks in Three High-Technology Industries." *Economic Geography*.

Power, D and D. Hallencreutz. 2007. "Competitiveness, Local Production Systems and Global Commodity Chains in the Music Industry: Entering the US Market." *Regional Studies* 41, 377–389.

Suchman, M. C. 2000. "Dealmakers and counselors: Law firms as intermediaries in the development of Silicon Valley". In *Understanding Silicon Valley*, ed. M. Kenney, pp. 71-97. Stanford, Calif.: Stanford University Press.

OPTIONAL: The research on clusters and networks of venture capital is enormous.

Storper, M. and A. J. Venables. 2004. "Buzz: face-to-face contact and the urban economy." *Journal of Economc Geography* 4: 351-370.

Sorenson, O. and T. E. Stuart. 2001. "Syndication networks and the spatial distribution of venture capital investments." *American Sociological Review* 106 (6): 1546-1588.

Bennett, R. J. and C. Smith. 2002. "The influence of location and distance on the supply of business advice." *Environment and Planning A* 34, (2): 251 - 270.

Muller E. and Zenker, A. 2001. "Business services as actors of knowledge transformation: The role of KIBS in regional and national innovation systems." *Research Policy* 30: 1501-16.

10. Monday, November 30 - Clusters and Universities

Colyvas, J., A., Crow, M., Gelijns, A., Mazzoleni, R., Nelson, R.R., Rosenberg, N., and Sampat, B. N. 2002. How do university inventions get into practice? *Management Science* 48 (1), 61-72.

Jong, S. 2006. "How organizational structures in science shape spin-off firms: the biochemistry departments of Berkeley, Stanford, and UCSF and the birth of the biotech industry." *Industrial and Corporate Change* 15, (2): 251–283.

Lerner, J. 2005. The University and the Start-Up:Lessons from the Past Two Decades. *Journal of Technology Transfer*, 30(1-2).

Mody, C. C. M. 2006 . "Corporations, Universities, and Instrumental Communities Commercializing Probe Microscopy, 1981–1996." *Technology and Culture* (47): 56-80.

Rothaermel, F.T., Agung, S.D., Jiang, L. 2007. University entrepreneurship: A taxonomy of the literature. *Industrial and Corporate Change* 16 (4), 691-791.

OPTIONAL:

Garnsey, E. and P. Heffernan. 2005. "Clustering as Multi-levelled Activity: The Cambridge Case." Paper presented at the Plenary Session III 4th European Meeting on Applied Evolutionary Economics (EMAEE) (21 May).

Shane, S. A. Academic Entrepreneurship: University Spinoffs and Weath Creation. Aldershot Edward Elgar 2004.