MASTER OF SCIENCE IN ECONOMIC DEVELOPMENT
TRENT LOTT NATIONAL CENTER FOR EXCELLENCE IN ECONOMIC DEVELOPMENT AND ENTREPRENEURSHIP
DEPARTMENT OF ECONOMIC DEVELOPMENT & TOURISM
COLLEGE OF BUSINESS

COURSE SYLLABUS
Course No.: ED 725

Title of Course: Entrepreneurship and Technology-based Economic Development
Semester: Spring 2015 (March – May)
Section: H001 (Hybrid Executive Format)

Instructor: Sumesh M. Arora, Ph.D.
Reflective Practitioner: Various
Office: #227 Trent Lott National Center for Excellence (TLNC) in Economic Development and Entrepreneurship Bldg.(TLNC), Hattiesburg, MS 39406
Email: sarora@innovate.ms; Sumesh.arora@usm.edu
Office Tel: 601-960-3659  Cell phone: 601-260-2107
Office Hours: By appointment. The instructor is also accessible online via the Blackboard Learning System or through contact information above.

Prerequisites: None

Credit Hours: 3 hours

In-Person: Saturday April 11th and Sunday April 12th (8am to 4:30 pm each day)
Location: TLNC 2f Classroom

On-line sessions: Thursdays @ 7-9pm: March 19, 26; April 2, 9, 16, 23, 30

Drop Date: Last day to drop second half-semester (8W2) classes without academic penalty: April 22, 2015. Please check with Valencia Hopkins for additional details.

Academic Calendar: http://www.usm.edu/registrar/calendars

I. COURSE DESCRIPTION:

Entrepreneurship and Technology-based Economic Development (3 credit course)–The course provides the student with instruction in the entrepreneurship and technological innovation theories, concepts and strategies in economic development and how to work with them in practice. The purpose of this course is to provide an introduction to entrepreneurship and how it may be used as a tool for economic development. Special attention will be paid to innovation and technology-based entrepreneurial development.
Conceptual outcomes. Students will address the following fundamental questions:

- **Entrepreneurship.** What are the basic components of entrepreneurship and how can entrepreneurship in general and specifically technology-based entrepreneurship (TBE) opportunities promote economic development?
- **Technology.** What is the nature and breadth of technology and innovation?
- **Development.** What is the relationship between technology-based economic development and overall economic and community development? How can positive outcomes of innovation-based development be enhanced and negative impacts minimized?

Entrepreneurship (specifically Technology-based Entrepreneurship (TBE)) and Technology-based Economic Development (TBED) will examine the theory, practice, implications, and history of TBE/TBED as it related to economic development and students will be introduced to key concepts such as intellectual property development, technology transfer and business plan development.

A constructivist approach will be used to develop students’ knowledge of TBE/TBED drawing from theoretical foundations in economics, marketing, and sociology. Using students’ current experiences and knowledge, these theoretical concepts will be developed and implemented into a preliminary business plan for a technology-based economic development cluster. Learning will be student-centered and based on a collaborative approach. The instructor will serve as a facilitator and coach to guide students toward learning goals. External resources in the form of business/content experts, course literature, books, journals, the Internet, and interviews will complete the learning cycle.

## II. COURSE OBJECTIVES:

The purpose of this course is to provide students with the basic knowledge about utilization of various technology platforms as a means for economic development. Cross-cutting academic and professional outcomes include:

- Gain familiarity with the academic literature, theories, controversies, and debates related to TBE/TBED
- Identify data resources, websites, and conceptual literature useful for TBE/TBED in professional practice
- Examine case studies of successful TBE/TBED
- Enhance skills in group discussion leadership, presentation, research, and writing
- Link theory with practical application in an applied project related to technology-based economic development
- Develop critical thinking, problem solving, and analytic skills
- Identify funding alternatives in TBE/TBED

By the end of the course you should be able to:

- Develop a plan to promote a cleantech cluster in Mississippi (via SWOT analysis)
- Demonstrate precise and varied language of TBE/TBED theory.
- Relate research methods to TBE/TBED needs.
ED 725 is a core course of the MS-ED and MS LTT programs & offered through The Department of Economic Development and Tourism

III. COURSE COMMUNICATION:
The main mode of Course communication such as obtaining lecture notes, recorded lectures, and assignments and exams will be through Blackboard 9.1 and Blackboard Collaborate. The interaction between instructor and students, as well as one-to-one communication will be through Blackboard, students USM email, and assignment feedback or comments. Students may contact instructor physically at any time by appointment. Goal here is to enhance the understanding of the course topics and the comprehension of the course content in area of entrepreneurship.

Technology Requirements
- Students require Computer, internet connection, and headphones/speaker. Students also require software including Microsoft Word, Excel, and Power Point to complete the assignments and course exams. A digital still/video camera with reasonable resolution may also be needed.

IV. CLASS PROCEDURES AND REQUIREMENTS:
Students are required to read assigned texts, articles, and chapters each week and be prepared to answer the questions posted in Blackboard of the readings. Books will be supplied to the students at the beginning of the semester. Articles will generally be posted on Blackboard, or students may need to download them on via provided links.

Reading Materials Quiz (5pts)
An on-line quiz will be administered on the IEDC Training Manual for Entrepreneurial and Small Business Development Strategies manual.

Short essay answer quiz (10 points)
Based on Szycher book and The Innovative and Entrepreneurial University – Department of Commerce report. Upload your assignment via Turitin.

Upload your assignment via Turitin.

Above assignments are unique individual efforts and will be submitted individually, but you are encouraged to discuss the readings with your classmates.

Technology Cluster Economic Development Plan (25 points)
The class will be divided in teams with approximately 4 students per team. Each team will develop a strategy for a developing a clean technology (cleantech) cluster that may
**Contribute to economic development in Mississippi.** For the purposes of this research, cleantech will encompass one or more of the following areas (these categories are based on the national Cleantech Open business plan competition):

- Energy generation
- Energy efficiency
- Combined Heating and Power (CHP)
- Sustainable agriculture, livestock production and forestry
- Water management and Conservation
- Waste Handling (reduction and disposal)
- Energy distribution and storage/ Smart grid
- Chemicals and advanced materials
- Green building/building automation
- Transportation

Begin with researching information about what is encompassed by clean technology cluster and see if you can find examples of similar initiatives in the United States or overseas. Understand the drivers for those areas for developing and promoting cleantech clusters, then lay the foundations for this project by defining what cleantech means for your team and its relevancy to Mississippi. Consider technologies that will be appropriate for Mississippi and markets that may be developed for domestic consumption or export, industries attracted, universities involved and create home-grown entrepreneurial ventures. Additional discussion for this project will take place during the in-person. The team paper should be uploaded to Blackboard using Turnitin. **Note: Upload one (1) paper per team.**

**In-person Presentation and associated paper (15+10=25 points)**

Each student will be required to give a presentation at the in-person on **Sunday (April 12)**, which will consist of two parts: (1) interviewing a technology-based entrepreneur the students may or may not be familiar with and (2) developing an “elevator pitch” for this entrepreneur’s business as if you were raising funding from potential investors. Prior on-line sessions will discuss how to develop an elevator pitch and the student may add to the venture they are learning about in terms of how they want to present this company to a potential investor. The class may get to informally vote on whether they would invest their money in a given deal or not (Note: a decision to invest or not to invest by the class will NOT affect the grade, but your classmates get to pretend play as “sharks” as on the ABC TV series “Shark Tank.”) The elevator pitch will be recorded during the in-person session and possibly uploaded to a website (depending upon provisions available through the department). The elevator pitch should be no longer than two (2) minutes or points will be deducted. A written paper of approximately 2,000 words will also be submitted electronically via Turnitin which describes the student’s experience in interviewing the entrepreneur, the information gained about the technology, the entrepreneur’s motivation to pursue that venture and description of the components of the elevator pitch.

**Short Answer Exam (10 points)**
A short answer exam of the readings and presentations following the comprehensive exam format will be made available on the last day of classes. The answers should be uploaded to Blackboard via Turnitin.

Class Participation (15 pts)
It is critical that everyone contributes to the “community of learning.” Each student must actively engage in the process, online and in class. Everyone's past and current experiences may significantly enhance the learning experience. In addition, research in human learning suggests that people construct knowledge through social interactions. Your attitudes toward contributing to and benefiting from the online chats and in person activities will have a direct effect on “knowledge construction” and on the overall success of this experience for you, your classmates and your professor.

NOTE: This class has a requirement of 10 hours of asynchronous engagement and responses to required readings and videos will be taken into account when coming up with the class participation grade. In addition to the videos listed in the syllabus, I will frequently post videos and articles to Blackboard and we will engage in discussion on these topics. Feel free to start a discussion thread on your own (that maybe worth extra points!) as well and encourage your fellow students to participate in discussions.

Class participation grade will be based on the following activities:
- Presentations during online sessions for selected articles
- Reviews of the videos posted to discussion board
- Other Discussion thread postings
- Engagement during in-person session

V. TEXTBOOK (S) AND/OR OTHER MATERIALS:


Additional Resources and Reading
Case Studies and Handbooks (posted in Blackboard):
ED 725 is a core course of the MS-ED and MS LTT programs & offered through The Department of Economic Development and Tourism

text book is available at
3. New version of Innovation U (Tornatzky and Rideout) is available at:
http://www.innovation-u.com/

Journal Articles (posted in Blackboard or download directly via provided link): One article will be discussed by a team of two students during each on-line session (total about 15 minutes per team) – presentations will count towards your class participation grade


Other Articles/Presentations (these are examples/suggested readings that will help with assignments)

Are Entrepreneurs Born or Made?
http://www.businessweek.com/smallbiz/content/jul2010/sb20100723_154719.htm

Local Heroes: Enterprise for Local Economies
NYC Clean Technology Entrepreneur Center

MD Clean Energy Tech Incubator Network
http://mdcleanenergy.org/programs_and_incentives/md_clean_energy_tech_incubator_network

Massachusetts Clean Energy Incubators

San Antonio Clean Energy Incubator
http://texasenergy.utsa.edu/research/san-antonio-clean-energy-incubator/

Entrepreneurship blog with various business incubation models

Business Xpansion Journal (cleantech opportunities)
http://bxjmag.com/category/industries/cleantech/

Business Facilities magazine (renewable energy)
http://businessfacilities.com/archives/articles-by-industry/renewable-energy-articles-by-industry/

Online videos

Edward Hess, “So you want to start a business”, Darden MBA ~ 55min: 1/12/09
https://www.youtube.com/watch?v=C9bnzetcD68

Guy Kawasaki: The Top 10 Mistakes of Entrepreneurs
https://www.youtube.com/watch?v=HHjgK6p4nrw

Seth Godin on Failing Until You Succeed
https://www.youtube.com/watch?v=fDtkBsWgzWE

Technology entrepreneurship video of course taught at Stanford U. by Chuck Easley
http://www.youtube.com/watch?v=MvPTVgGU5yc

National Clean Energy Business Plan Competition (pitch videos)
VI. METHODS OF STUDENT EVALUATION:

The following table displays the percentage breakdown of the required assessments for ED725 along with the due dates:

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
<th>Due Dates (2015) – by midnight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quiz (based on IEDC Manual)</td>
<td>5%</td>
<td>March 28</td>
</tr>
<tr>
<td>Short essay answer quiz (based on Szycher and Innovative and Entrepreneurial University report)</td>
<td>10%</td>
<td>April 04</td>
</tr>
<tr>
<td>Entrepreneurial Elevator Pitch <em>(at in person)</em></td>
<td>15%</td>
<td>April 12</td>
</tr>
<tr>
<td>Elevator pitch paper</td>
<td>10%</td>
<td>April 18</td>
</tr>
<tr>
<td>Book Summary #1 (Walzer)</td>
<td>10%</td>
<td>April 25</td>
</tr>
<tr>
<td>Mississippi Cleantech Cluster Economic Development Plan <em>(Team project)</em></td>
<td>25%</td>
<td>May 2</td>
</tr>
<tr>
<td>Short answer final exam</td>
<td>10%</td>
<td>May 6</td>
</tr>
<tr>
<td>Class Participation (includes 10 hours of asynchronous engagement, forum discussions and online presentations)</td>
<td>15%</td>
<td>throughout</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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Grading Scale
Total 100-point scale below:

*Grade of C+ through F:* A substantial portion of the required work has been deficient or incomplete. This may include missing class time beyond the norm presented by the syllabus or work not completed at a minimum graduate level.

*Grade of B-(82-80):* Some important parts of the required work are below the minimally acceptable level for the course. This may include work that is submitted late, incomplete or flawed written assignments or research presentations, or work that fails to meet the course requirements in some other way.

*Grade of B (85-83):* All the requirements and expectations for the grade level have been completed including the quality of writing, and research, as well as specific tasks or products required for receiving credit.

*Grade of B+ (89-86):* All basic requirements of the course have been met at the graduate level, and, in addition, some element or part of the work has exceeded these basic expectations. These elements might include superior conceptual insights, research beyond expectations or exceptionally skilled written or oral assignments. The key word for this grade is "insight."

*Grade of A- (92-90):* The work surpasses expectations for the course and gives evidence of a mastery of the subject matter. These elements might include impressive conceptual insights, research beyond expectations or exceptionally skilled written or oral presentations. The key
word for this grade is "mastery."
Grade of A (100 to 93): Throughout the course, the student has performed well above expectations and, at times, has achieved excellence. Evidence of performance at this high level may include certain elegance in the final essays or presentations, creativity in one's approach

**Late Assignments or Projects**
(25-50)% points will be taken off your grade for late submissions of homework. The amount of points taken off is dependent on the lateness of the assignment (25% for one week late and 50% points for 2 weeks late).

### VII. COURSE SCHEDULE:

<table>
<thead>
<tr>
<th><strong>ED 725</strong></th>
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<tbody>
<tr>
<td><strong>In-Person Sessions</strong></td>
<td></td>
</tr>
<tr>
<td>(4/10: Class social- TBD)</td>
<td></td>
</tr>
<tr>
<td>4/11 – 8:00 a.m. – 4:00 p.m. (Practitioner presentations)</td>
<td></td>
</tr>
<tr>
<td>4/12 – 8:30 a.m. – 4:00 p.m. (Student elevator pitches and MPI tour*)</td>
<td></td>
</tr>
</tbody>
</table>

#### Chat Sessions Dates and Overview
- Each session will include a **15 minute student led segment** and a 5 minute break.
- Students are expected to come to the discussion with several questions/insights to pose to the instructors and fellow classmates
- Postings on the Blackboard discussion thread will be reviewed
- Other relevant topics related to readings will be discussed as well

*Online chat sessions Thursday nights from 7-9 pm CST*

- March 19, 2015: IEDC Manual discussion
- March 26, 2015: Dept. of Commerce report discussion
- April 02, 2015: Szycher book discussion
- April 09, 2015: Szycher book discussion
- April 16, 2015: Szycher book discussion
- April 30, 2015: Walzer book discussion

#### In-Person Class Location:

**March 11-12, 2015**
**Room # 207, Trent Lott National Center for Excellence in Economic Development and Entrepreneurship, USM Hattiesburg Campus**
Learning Outcomes:

- Understand what is technology-based entrepreneurship (TBE) and economic development (TBED)
- What role entrepreneurship plays in Technology-Based Economic Development (TBED)
- Understanding those factors that attract the development of an environment that support TBE and IBED (TBED)
- Understanding the effects of government policy on TBE and TBED and the growth of the supporting knowledge economy
- Develop critical thinking skills requisite to breaking down the relationships between the above described variables

Overview of in-person sessions:

Students may expect to engage in critical analysis of current issues facing economic development professionals in the emerging innovation-based/knowledge-based economy and the role that innovation-based entrepreneurship plays in regional economic development in seminar format at the 2-day session. Students will be provided materials, handouts, and supplementary materials requisite for their study at the onset of the in-person meetings. Students will also have an opportunity to tour a technology incubator.

**Day 1** – students will be exposed to a variety of technology based economic development and entrepreneurship theories, strategies, tactics and practitioners. Students will engage in activities designed to critically examine the role of the knowledge economy in tech-based entrepreneurship (TBE).

**Day 2** – students will deliver formal presentations (elevator pitches) and engage in discussions regarding local, regional, state and national policy and implementation of TBE and TBED. We will discuss the clean cluster team project.

Detailed in-person schedule is being developed – but highlights of the two-day session will include:

- Student *elevator pitches* based on interviews of technology entrepreneurs
- Presentations from personnel at *Innovate Mississippi* (includes information on innovation based entrepreneurial ventures, angel investment network, innovation-based economic development
- Presentation by *USM Office of Technology Development*
- Presentation by the *USM Accelerator and tour the Mississippi Polymer Institute/USM Accelerator*

**VIII. GENERAL POLICIES/GUIDELINES:**
• If you require an accommodation based on disability, please meet with me in the privacy of my office, during the first week of the semester, to make sure you are properly accommodated.
• Students must work alone on all assignments, unless otherwise instructed.
• When homework is assigned, you will be told whether it will be collected and graded. Recommendation: Do the homework - it will help you learn.
• **Learner Centered Partnership**
  
  o Students should feel free to discuss with the instructor ways to make assignments fit their needs. However, it is the instructor’s responsibility to challenge each student to “stretch” outside of their comfort zone – a necessary process for growth and development. Each student is expected to attend all sessions (in-person and online) and to make a significant positive contribution to the learning experiences. An opportunity to improve based on instructor feedback will be given to all students before final grades are determined **ONLY if submitted on time.**

**USM RESOURCES**

**WRITING CENTER**

The Writing Center is a free tutorial service available to any USM student who wants assistance with a writing project. The center offers one-to-one writing instruction that’s designed to help students become a more effective writer. The center offers tutorial service on a walk-in basis or by appointment (on the hour for an hour). In each session, a tutor talks with students about their writing project, asking them questions that will help students clarify their thoughts, specify their purpose, and decide how to proceed. Tutors do not write papers for students but they will help students find ways to develop their ideas more fully and express them more effectively.

**Sites of Operation**

The Hattiesburg Writing Center  
Location: Cook Library, Room 112  
Phone: (601) 266-4821  
E-mail: writing.center@usm.edu  
Web site: www.usm.edu/writingcenter

The Gulf Coast Writing Center  
Location: Gulf Park Library, Room 107  
Phone: (228) 214-3411  
E-mail: coastwritingcenter@usm.edu  
Web site: www.usm.edu/gulfcoast/gcwc/index.php

**SPEAKING CENTER**

The University of Southern Mississippi offers a Speaking Center, with consultations available at no cost to all students, faculty, and staff. The Speaking Center at the USM could be a great help
for the students of Industrial Engineering Technology to prepare, organize, and delivery of their presentations. I consider the Center to be an extension of the class. The center is a space to refine your skills, address questions, and practice your speeches. The tutors of the speaking Center are there to help you with your speeches. Students who make regular use of this resource become better speakers and do better on their assignments. You can visit the center’s website to access tips on various areas of improving your presentation, making appointments with tutors, and arranging mock presentation at www.usm.edu/speakingcenter

Sites of Operation

The Speaking Center
Hattiesburg Campus
Cook Library, Room 114
601-266-4965
speakingcenter@usm.edu

The Speaking Center
Gulf Park Campus
Gulf Park Library, Suite 107
228-214-3413
Casey.Maugh@usm.edu

USM STUDENT HANDBOOK

Academic Dishonesty

It is the philosophy of The University of Southern Mississippi that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

The following is from the USM Undergraduate Bulletin:

“When cheating is discovered, the faculty member may give the student an F on the work involved or in the course. If further disciplinary action is deemed appropriate, the student should be reported to the Dean of Students. In addition to being a violation of academic honesty, cheating violates the Code of Student Conduct and may be grounds for probation, suspension, and/or expulsion. Students on disciplinary suspension may not enroll in any courses offered by The University of Southern Mississippi.”

My choice is to give you an F in the course if I discover that you are cheating!!

Students must send the instructor an e-mail using the course web site e-mail stating that they understand USM’s academic honesty policy and also understand that if they do not uphold the standards of academic honesty, the instructor will enforce all applicable punishment.
Plagiarism

Plagiarism is the act of taking another person's writing, conversation, song, or even idea and passing it off as your own. This includes information from web pages, books, songs, television shows, email messages, interviews, articles, artworks or any other medium. Whenever you paraphrase, summarize, or take words, phrases, or sentences from another person's work, it is necessary to indicate the source of the information within your paper using an internal citation. It is not enough to just list the source in a bibliography at the end of your paper. Failing to properly quote, cite or acknowledge someone else's words or ideas with an internal citation is plagiarism.

Students are highly recommended to complete the Plagiarism Tutorial accessible to the USM Libraries, at http://www.lib.usm.edu/legacy/plag/plagiarismtutorial.php within the second week of their classes.

Statement of “Turnitin” Use

Turnitin is recognized worldwide as the standard in online plagiarism prevention. Turnitin’s comprehensive plagiarism prevention system lets instructors quickly and effectively checks all of their students’ work in a fraction of the time necessary to scan a few suspect papers using a search engine. The University of Southern Mississippi is using this software to detect, deter, and reduce plagiarisms in student’s writing assignments.

Students are required to turn their project report/research paper electronically in MS word or PDF format which is compatible to check against plagiarisms using Turnitin software. Your assignment will be checked for plagiarism randomly.

ADA Syllabus Statement

If a student has a disability that qualifies under the Americans with Disabilities Act and requires accommodations, he/she should contact the Office for Disability Accommodations (ODA) for information on appropriate policies and procedures. Disabilities covered by the ADA may include learning, psychiatric, physical disabilities, or chronic health disorders. Students can contact ODA if they are not certain whether a medical condition/disability qualifies. Mailing address:

Gulf Coast:
The University of Southern Mississippi on the Gulf Coast
Office of Disability Accommodations
730 E. Beach Blvd
Long Beach, Ms 39560
Voice Telephone or TTY: (228) 214-3232

Hattiesburg:
The University of Southern Mississippi
Office of Disability Accommodations
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