

## **CREATING A SCIENTIFIC BUSINESS VENTURE**

Millikin University

Biology 260 / Entrepreneurship 160

Fall 2010

1 credit

Meeting time and place: Tues., 6:00 PM – 6:50 PM, LTSC 209

Instructor: Dave Horn (e-mail – [dhorn@millikin.edu](mailto:dhorn@millikin.edu); phone – 217-424-6392; FAX – 217-424-3917; office – LTSC 225; research labs – LTSC 210 and 211; office hours – 1:00-3:00 PM, Tues. and Thurs., 2:00-3:00 PM, Wed., and by appointment)

**Purpose of the course:** This seminar is designed to introduce students to entrepreneurship and how to apply an entrepreneurial mindset by participating in a scientific business venture. The course will include two components: a series of one-hour sessions on entrepreneurial topics from the perspective of a scientist, and a practicum in which students gain experience in assisting with one aspect of a scientific business venture or develop a concept for a new scientific business venture.

**Course objectives and student learning outcomes:** Upon completion of this course, students should:

- 1) Have an introduction to entrepreneurship (Outcome measured and evaluated through readings and project)
- 2) Gain experience working with a scientific business venture (Outcome measured and evaluated through project)
- 3) Develop a concept for a scientific business venture (Outcome measured and evaluated through project)

**Course prerequisites:** There are no prerequisites for this course.

**About the instructor:** I received my B.A. in Biology from Hiram College, a M.S. in Biological Science from the University of Mississippi, and a Ph.D. in Ecology and Evolutionary Biology from Iowa State University. I was an Assistant Professor of Biology at Aurora University for five years before joining the faculty at Millikin University. My research interests include how habitat loss and fragmentation have impacted grassland, wetland and forest bird populations; the impact of wind turbines, television towers, and windows on bird populations; and wild bird feeding.

**Format of class sessions:** This is a student-centered class; that is, students take responsibility for their own learning in the classroom by performing the assigned readings, asking and answering questions, individually reflecting on material presented in class, and working collaboratively with classmates. Class sessions typically involve a combination of lecture, discussion, individual assignments, and group activities.

**Required text:**

There are no required texts for the course.

**Reading List:**

Bornstein, David. 2007. How to change the world: Social entrepreneurs and the power of new ideas. Updated edition. Oxford University Press, New York.

Robertson, Larry. 2009. A deliberate pause: Entrepreneurship and its moment in human progress. Morgan James Publishing, New York.

Shane, Scott. 2010. Born entrepreneurs, born leaders: How your genes affect your work life. Oxford University Press, New York.

**Student work load:** In addition to the 1 hours spent in class, students should anticipate spending an additional 2-3 hours weekly preparing for class through readings, preparing for discussions, and working on the project assignment.

**Daily responsibilities:**

- 1) Attend class sessions.
- 2) Each student is expected to have read and be prepared to discuss the readings that are assigned for each class period.

**Grading system:** The course grade will be based upon reading assignments and a project.

100 points can be earned through 10 reading assignments each worth 10 points.

100 points can be earned through the project assignment.

Reading Assignments	100 points
Project Assignment	<u>100 points</u>
Total:	200 points

**Grading Scale:**

180 points and above	( $\geq 90\%$ )	- A
160 – 179 points	(80-89%)	- B
140 – 159 points	(70-79%)	- C
120 – 139 points	(60-69%)	- D
<120 points	( $\leq 59\%$ )	- F

**Handing in Assignments Late:** Assignments are due at the date and time specified. Exceptions will only be given in the following cases: 1) illness of student (verified by a healthcare provider), 2) serious illness or death in the immediate family, and 3) participation in an activity officially sponsored by the University. Students that turn in assignments late due to other extenuating circumstances will be determined on a case-by-case basis. Students must notify the professor prior to the date and time the assignment is due if they will be turning in the assignment late. Students who have not received permission to turn in their assignment late will have a one-letter grade deduction for each day the assignment is late.

Final Exam Policy: There is no cumulative final exam.

**First day assignment:** After reading the syllabus, write the following information on a piece of paper: name, phone number (cellular and campus, if applicable), e-mail address, expectations you have for the course (i.e., what are your goals for the course), and three specific questions you would like to have answered by the end of the course (i.e., what questions about creating a scientific business venture would you like answered by the end of the semester). Students who complete and turn in the first day assignment at the beginning of the second day of class will earn five bonus points toward their final grade.

**Academic Honesty Policy:** All students are expected to uphold professional standards for academic honesty and integrity in their research, writing, and related performances. Academic honesty is the standard we expect from all students. Read the Student Handbook for further details about offenses involving academic integrity at: <http://www.millikin.edu/handbook/>. Staley Library also hosts a web site on Preventing Plagiarism, which includes the complete university policy. It is located at: <http://www.millikin.edu/staley/services/instruction/Pages/plagiarism-faculty.aspx>. Visit and carefully read the Preventing Plagiarism web site.

The Faculty has the right and the responsibility to hold students to high ethical standards in conduct and in works performed, as befits a scholar at the university. Faculty members have the responsibility to investigate all suspected breaches of academic integrity that arise in their courses. They will make the determination as to whether the student violated the Academic Integrity Policy. Should the faculty member determine that the violation was intentional and egregious, he or she will decide the consequences, taking into account the severity and circumstances surrounding the violation, and will inform the student in writing, forwarding a copy of the letter to the Registrar and to the Dean of Student Development.

This letter will be destroyed when the student graduates from the University unless a second breach of integrity occurs, or unless the first instance is of sufficient magnitude to result in failure of the course, with an attendant XF grade recorded in the transcript. If an XF is assigned for the course, the faculty letter of explanation becomes a permanent part of the student's record. If a second violation occurs subsequent to the first breach of integrity, the Dean of Student Development will begin disciplinary and judicial processes of the University, as outlined in the Student Handbook.

If a student receives an XF for a course due to academic dishonesty, this remains as a permanent grade and cannot be removed from the transcript. However, students may repeat the course for credit toward graduation. Some programs and majors have more explicit ethical standards, which supersede this Policy, and violation of which may result in dismissal from some programs or majors within the University. If you have difficulty with any assignment in this course, please see me rather than consider academic dishonesty.

**Disability Accommodation Policy:** Please address any special needs or special accommodations with me at the beginning of the semester or as soon as you become aware of your needs. If you are seeking classroom accommodations under the Americans with Disabilities Act, you should submit your documentation to the Office of Student Success at Millikin University, currently located in Staley Library 014.

**Attendance and participation policy:** Students will lose 5% from their overall grade after missing the second class, an additional 10% after missing the third class, 20% after missing the fourth, and will fail the course after missing five or more classes. Students who miss class because of: 1) illness of student (verified by a healthcare provider), 2) serious illness or death in the immediate family (evidence is needed), 3) participation in an activity officially sponsored by the University, or 4) other extreme extenuating circumstances are encouraged to notify the professor prior to the missed class, as such absences are excused.

It is expected that each member of the class will conduct themselves in a professional manner. Professional attributes include arriving to class on time, being prepared for each class session by asking questions in class, answering questions that are asked in class, actively participating in small group activities, volunteering for miscellaneous tasks, and notifying the instructor of problems that occur during class (e.g., you can't see what is written on the overhead projector). Failure to be prepared for class is considered to be absent from class.

There is no eating in class, and there will be a -5 point deduction from your overall grade for every time you use portable electronic devices such as iPods and your cell phone during class. The best policy is to keep your cell phones, iPods and other electronic devices off, and packed away.

**Want to enhance your performance in class?** If you are ever having trouble in the course or would like to improve on an already solid performance, please visit with me. Feel free to stop by during office hours, make an appointment, or just come in and see if I am available. I will be happy to review material, offer you advice on how to prepare for my assignments, and go over graded assignments with you to see what you missed.

**Daily lecture schedule:** The lecture portion of the course will be divided into 2 major parts: 1) discussion of assigned readings on entrepreneurial topics, and 2) working on a scientific business venture.

<u>Day:</u>	<u>Topic:</u>
Aug. 24	Introduction to Class and Entrepreneurship
Aug. 31	Introduction to National Bird-Feeding Society
Sept. 7	<b>DISCUSSION: Robertson – An Entrepreneur Defined</b>
Sept. 14	<b>No class</b>
Sept. 21	<b>DISCUSSION: Robertson – Exposing the Myths of the Entrepreneur</b>
Sept. 28	<b>DISCUSSION: Robertson – The Entrepreneur as Change Catalyst</b>
Oct. 5	<b>DISCUSSION: Robertson – The Entrepreneurial Ecosystem – From One to Many</b>
Oct. 12	<b>DISCUSSION: Bornstein – The Light in My Head Went On</b>
Oct. 19	<b>DISCUSSION: Bornstein – If the World Is to Be Put in Order</b>
Oct. 26	<b>DISCUSSION: Bornstein – Something Needed to Be Done</b>
Nov. 2	<b>No class – Scheduling Day</b>
Nov. 9	<b>DISCUSSION: Shane – Born Leaders? How Genes Influence Leadership</b>
Nov. 16	<b>DISCUSSION: Shane – Creative Genius? Your Predisposition for Innovation</b>
Nov. 23	<b>No class</b>
Nov. 30	<b>DISCUSSION: Born Entrepreneurs? Genes and Tendency to Start Companies</b>
Dec. 7	<b>Project Presentation</b>
Dec. 14	<b>Project Presentation</b>