Instructor and Course Information:

- Course Title: Business Development Experience – I
- Course Number: BUS 4991 (Fall, 2014)
- Course Instructor: Dr. Saurav Pathak, PhD
  Telephone: 906-487-1707, please leave a message at any time
  Email: sauravp@mtu.edu
  Office Hours: Mondays 10:30 AM – 11:30 AM

Course Meeting Times:

Tuesday, 7:05 – 9:35 pm; Chemical Science Building, Room 108

Course Description:

Students will be working with inventors, innovators, entrepreneurs or even established businesses over a period of two semesters. They will assist these entities in taking their businesses forward and in the process gain valuable experiential learning in “business development”. This course is designed to teach students how to research, develop, and write commercialization plans that can be used to either launch or expand successful businesses. Students will apply knowledge, skills, concepts, and strategies relevant for product innovation. A practical, hands-on approach encourages students to apply their skills in the vision, research, and planning aspects of commercial ventures. Students gain insight in how the technical and commercial pieces of the opportunity fit together and why the different aspects need to be managed in harmony for the venture to operate successfully.

Course Overview:

Where applicable, projects for the course will fundamentally come from any or all of the following entities:

1. Senior Design project
2. Enterprise project
3. MTEC SmartZone
4. Technological Innovations either patented or being considered for patenting at the Technology Transfer Office housed in the Advanced Technology Development Complex
5. Innovators, entrepreneurs or both in and around the Upper Peninsula
The focus of this course is to develop a successful action plan necessary to commercialize the technical innovation that is being developed in parallel. The work completed in the Fall of 2014 under the purview of BUS 4991 (Business Development – I) will lay the foundation for BUS 4992 (Business Development – II offered in Spring of 2015), which focuses on planning to implement the recommendations made in the first semester and complete “business actions” set for students by the project owner (i.e., any of the 5 entities mentioned above). Overall, students will be working in what could be considered as a sustainable entrepreneurial eco-system.

Course Objectives:

Throughout the course, you will explore and practice entrepreneurship by applying undergraduate business concepts and completing the following entrepreneurial activities:

- Inform the technical development team or the project owner with relevant business insights usable as a solution for the given problem
- Identify and propose ways to meet market needs through customer discovery
- Objectively evaluate the business concepts and business models
- Enhance and apply business fundamentals such as marketing, product/service development, management, and financials for business plan development
- Understand the infrastructure relevant for your business operations and processes
- Explore business risk and success factors
- Respond to changes that can impact your business plan
- Develop actionable business plans (to be completed in BUS 4992)

Course Outcomes:

Students will learn to:

- Determine the commercial viability of the business idea being pursued
- Develop working strategies needed for “route to market”
- Determine pros and cons of filing for a patent – patenting strategies
- Assume entrepreneurial and leadership roles by working close with real world entrepreneurs
- Deal with frustrations often associated with starting a business and subsequently sticking with it to realize growth
- Persevere with an idea that they want to start a business around
- Communicate and be precise
Required Resources:

Information will be provided by the course instructor regularly throughout the semester. No specific textbook is required for purchase.

Course Website:

- Canvas: [https://mtu.instructure.com/courses/952687](https://mtu.instructure.com/courses/952687)

Course Methodology and Structure:

The course is meant to be a highly interactive, developmental experience for students requiring extensive exploratory inquiry, opportunity assessment, data gathering and analysis, problem solving, information synthesis and communication. Each week, students would be refreshed with topics relevant to business development. It is expected that students recall these concepts from the other courses that they would have taken during the first three years at MTU. This course is about applying business concepts already learnt and knowledge already gathered towards developing a business in a real world setting.

Students would be divided into groups wherein each group represents the business presented to them. The group-members will call their project as “My Business” or call it by its name (if a company name exists). Students would be assigned their respective groups depending upon the requirements of the business. For example, if a business project requires more attention on marketing, then the group will draw upon the “expertise” of marketing majors. At the end of the day, the group members would represent various “business expertise” that the business project would require.

Weekly take-home and in-class assignments will focus on exercising business concept’s relevant to projects, teamwork and communication with fellow students, instructors, entrepreneurs, engineers, business professionals, potential customers and other stakeholders linked to the assigned projects. Wherever applicable and whenever possible, students will work directly with innovators and entrepreneurs – of whose projects the students would be pursuing. They would be invited to our class periodically or arrangements would be made for our students to meet up with them.

During the in-class activities, students will be asked to make impromptu presentations or address the questions that feature in the assignments scheduled for next week. In other words, assignments due a
week later would be taken up briefly by students during class time. That way, the students would be able
to have a first look at the expectations of the assignments and make a better quality assignment
submission the following week.

Another aspect of the course will be student participation in several competitions across the nation. The
instructor would bring it to the attention of the groups when and where to register for participation in
competitions.

Course Assessment:

1. Weekly written assignments and presentations – wherever applicable - are a significant part of
the course requirements.

2. Along with required in-class and weekly assignments, a communication log per group must be
maintained and turned in on Canvas for instructor review on a weekly basis.

3. Students will be required to complete a comprehensive concept evaluation and market analysis
of the product/service resulting from the proposed design.

4. In addition, students will be working throughout the course to develop draft sections of the
commercialization plan that will be completed in BUS 4992 – i.e., in the spring of 2015.

Student Evaluation:

Evaluation of student mastery of course competencies will be based on the following:

1. **Sticking to format of file submissions**

Any file that needs to be uploaded (as part of submission and as directed by the instructor, for
example, power point slides, assignment documents, etc) must follow “**Group Name_ Week Number_Type of Submission**). As an example, say you are submitting a power-point
presentation (or any other file format), then your file name should be “Assisted Listening
Device_Week 1_Power Point Slides”. Another example, say you are submitting group
assignment number 5, then the file name should be “Assisted Listening Device_Week
5_Assignment 5”. **10% of the points allotted for any submission would be deducted on failure
to stick to the format.**

2. **Weekly Communication Log submission (5% OF TOTAL GRADE)**
A file must be submitted every week that details what the group has been doing that week. The format should be “Assisted Listening Device_Week 1_Communication Log”, “Assisted Listening Device_Week 2_Communication Log”. Students are expected to continue communicating with their business owners throughout the semester including the weeks after the Thanksgiving break. The communication log will document the groups’ interaction with their business owners achieved that week and the action plans that the groups have for the next week. In some weeks, when neither of these could have been possible, the groups are still required to submit a log saying “No substantial progress made” or “Client contact not established this week”. Multiple submissions that document “no work done” would reflect badly upon the groups. **Failure to submit weekly communication logs (per group) or late submissions would result in no score or 20% of the allotted points respectively.** The instructor would create an “Assignment” on Canvas titled “Weekly Communication Log Submission” wherein the groups would submit their weekly communication logs (per group per week).

3. **In-class activities and participation (15% OF TOTAL GRADE).**

This may include discussions, presentations, on the spot assignment, etc; as the case may be. The scores for any **in-class on the spot assignment** will be revealed to the groups then and there. The instructor will explain to the groups where they could improve. When the corrected/edited assignment would be submitted next week, the instructor would expect that the groups would have corrected those areas where they lost points for the **in-class on the spot assignment**.

4. **Team Involvement (20% OF TOTAL GRADE).**

Teams will be evaluated on the attitude they show towards adding value to their businesses, their willingness to take initiatives, their preparedness to achieve business actions that their project demands. Teams must bring it to the attention of the instructor if one or more members of the team are reluctant to participate. This should be done sooner than later. In addition, team involvement would be judged based upon teams’ participation in competitions (wherever and whenever applicable) and the quality and frequency of their interaction with their business owner counterparts. The most important aspect of this course is to assist businesses develop and hence your assistance to your business owners is an important criterion upon which the team performance would be evaluated.

5. **Weekly Assignments (written work and oral presentations) (20% OF TOTAL GRADE).**

These would be group assignments unless mentioned otherwise. Students will be evaluated based on the quality of work, degree of value added to the groups’ learning experience and the extent of value added to the business. At the end of the semester, all points for individual assignments would be converted to scores out of 100. No or late submissions will result in no score or 20% of the allotted points respectively.
6. **Final Report (20% OF TOTAL GRADE)**

   Each group is required to submit a comprehensive report at the end of the fall semester. The report could be a compilation of all the assignments done over the semester. The instructor would expect to see the extent to which groups have been able to develop the businesses they would be working on. Business actions achieved by groups that actually benefit the business owner would be highly rewarded.

7. **Final Presentation (20% OF TOTAL GRADE)**

   • Presentations at the end of the semester would be evaluated on the following items:
     
     o Actionable milestones accomplished that benefited the business (Owners feedback would also be taken into consideration during evaluation)
     o Quality of deliverable
     o Communication
     o Professionalism
     o Anticipated action plan and deliverable for Spring 2015

**Grading Policy:**

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Minimum Percentage</th>
<th>Grade points/credit</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93%</td>
<td>4.00</td>
<td>Excellent</td>
</tr>
<tr>
<td>AB</td>
<td>88%</td>
<td>3.50</td>
<td>Very good</td>
</tr>
<tr>
<td>B</td>
<td>82%</td>
<td>3.00</td>
<td>Good</td>
</tr>
<tr>
<td>BC</td>
<td>76%</td>
<td>2.50</td>
<td>Above average</td>
</tr>
<tr>
<td>C</td>
<td>70%</td>
<td>2.00</td>
<td>Average</td>
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<tr>
<td>CD</td>
<td>65%</td>
<td>1.50</td>
<td>Below average</td>
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<tr>
<td>D</td>
<td>60%</td>
<td>1.00</td>
<td>Inferior</td>
</tr>
<tr>
<td>F</td>
<td>59% and below</td>
<td>0.00</td>
<td>Failure</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete; given only when a student is unable to complete a segment of the course because of circumstances beyond the student’s control. A grade of incomplete may be given only when approved in writing by the department chair or school dean.</td>
<td></td>
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</tr>
<tr>
<td>X</td>
<td>Conditional, with no grade points per credit; given only when the student is at fault in failing to complete a minor segment of a course, but in the judgment of the instructor does not need to repeat the course. It must be made up within the next semester in residence or the grade becomes a failure (F). A (X) grade is computed into the grade point average as a (F) grade.</td>
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Course Schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Discussion topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sept. 2</td>
<td>Course overview, Product and company vision</td>
</tr>
<tr>
<td>2</td>
<td>Sept. 9</td>
<td>Product features and benefits, Minimum Viable Product</td>
</tr>
<tr>
<td>3</td>
<td>Sept. 16</td>
<td>Industry and competitive analysis</td>
</tr>
<tr>
<td>4</td>
<td>Sept. 23</td>
<td>Market opportunity and customer segments</td>
</tr>
<tr>
<td>5</td>
<td>Sept. 30</td>
<td>Value Proposition and Business Model</td>
</tr>
<tr>
<td>6</td>
<td>Oct. 7</td>
<td>Marketing, sales and channel distribution</td>
</tr>
<tr>
<td>7</td>
<td>Oct. 14</td>
<td>Value chain and pricing methods</td>
</tr>
<tr>
<td>8</td>
<td>Oct. 21</td>
<td>Risk mitigation</td>
</tr>
<tr>
<td>9</td>
<td>Oct. 28</td>
<td>Scale-up, costs and production</td>
</tr>
<tr>
<td>10</td>
<td>Nov. 4</td>
<td>Intellectual Property</td>
</tr>
<tr>
<td>11</td>
<td>Nov. 11</td>
<td>Financial model, cash flow and capital requirements</td>
</tr>
<tr>
<td>12</td>
<td>Nov. 18</td>
<td>Presentation preparation in class</td>
</tr>
<tr>
<td></td>
<td>Nov. 25</td>
<td>No class</td>
</tr>
<tr>
<td>13</td>
<td>Dec. 2</td>
<td>Final presentations</td>
</tr>
<tr>
<td>14</td>
<td>Dec. 9</td>
<td>Final presentations</td>
</tr>
<tr>
<td>15</td>
<td>Dec. 16</td>
<td>All final reports due</td>
</tr>
</tbody>
</table>

PLEASE NOTE: This is designed to be a highly interactive course. The above course schedule is subject to ongoing development including dates of presentations and assignments as appropriate. Please deliver graded material as it is scheduled during the course on time and let the course instructor know if you anticipate any interruptions concerning your attendance. Thank you.

Course Policy:

Any activity that could compromise your legitimate performance in this course is strongly discouraged.

University Policy:

Academic regulations and procedures are governed by University policy. Academic dishonesty cases will be handled in accordance the University's policies.

If you have a disability that could affect your performance in this class or that requires an accommodation under the Americans with Disabilities Act, please see me as soon as possible so that we can make appropriate arrangements. The Affirmative Action Office has asked that you be made aware of the following: Michigan Tech complies with all federal and state laws and regulations regarding discrimination, including the Americans with Disabilities Act of 1990. If you have a disability and need a reasonable accommodation for equal access to education or services at Michigan Tech, please call the Dean of Students Office, at 487-2212. For other concerns about discrimination, you may contact your advisor, department head or the Affirmative Action Office, at 487-3310.
Academic Integrity: http://www.studentaffairs.mtu.edu/dean/judicial/policies/academic_integrity.html

Affirmative Action: http://www.admin.mtu.edu/aoa/


Disability Services:
http://www.admin.mtu.edu/urel/studenthandbook/student_services.html#disability