Course Syllabus: Project I - Learning to Learn

1. **Course number and name**
   EENG 1910 Project I: Learning to Learn

2. **Credits and contact hours**
   3 credit hours, Thursdays 2:30 PM - 5:20 PM

3. **Instructor’s or course coordinator’s name**
   Dr. Oscar N Garcia
   TA: Lokesh Kumar Viswavarapu (Lokesh)

4. **Text book, title, author, and year**
   a. **other supplemental materials**
      Course material in Black Board.
      Multisim
      Electronic Learning Lab kit

5. **Specific course information**
   a. **Brief description of the content of the course (catalog description)**
      This course consists of fifteen lessons. We think that achieving those objectives will contribute significantly to your success while in school and, if you refresh them and review the hints given, your advancement in your professional life. They also cover seven course learning objectives that we report to ABET, the engineering accrediting agency that recommends them. This course has 3 major parts:

      Part I: How can you improve your Learning and Communication skills?
      Part II: What are your best cognitive (learning and understanding) abilities and Knowledge Representation (to best communicate your understanding) skills?
      Part III: How to succeed in the Engineering Profession? Is there a formula?

   **Catalog Description**
   1910. Project I (Learning to Learn). 3 hours (2;2). Learning to Learn (L2L) is based on sound cognitive and pedagogical techniques that improve learning outcomes and make lifelong learning habitual. Students will develop an understanding on how engineering is learned and how they can facilitate and encourage the lifelong learning process, both individually and in teams. Topics covered include consciousness and self-awareness, knowledge representation, cognition, learning styles, memory, language, reading, effective verbal and written communication, project-based learning, critical thinking, problem solving and creativity, design process, globalization and contemporary issues, professionalism and ethics. Topics covered include: consciousness and self-awareness, metacognition, learning styles, memory, language, reading, writing, problem solving, creativity and biology of learning.
Prerequisites or co-requisites
None.
Student must be an EE major in order to enroll in this course.

b. Whether a required, elective, or selected elective (as per Table 5-1) course
Required course.

6. Specific goals for the course
a. Specific outcomes of instruction
Course Learning Outcomes (CLOs), that is, the areas for student learning in this course are:
[CLO-1] Introduction to Learning to Learn
[CLO-2] Inspired to Learn
[CLO-3] Effective Communications
[CLO-4] Intelligence and Cognition - Learning
[CLO-5] Project I Presentation and Report
[CLO-6] Cognition and Knowledge Representation
[CLO-7] Conceptualizing and Being Efficient
[CLO-8] Problem-solving Thinking Metacognition
[CLO-9] Critical and Analytical Thinking
[CLO-10] Project II Presentation and Report
[CLO-11] The Engineering Design Process
[CLO-12] Professionalism, Ethics and the IEEE
[CLO-13] Contemporary Issues in Electrical Engineering
[CLO-14] Summary and overall discussion of the course

b. Indication of which student outcomes listed in Criterion 3 or any other outcomes are addressed by the course
The following table indicates the relationship between course learning outcomes (CLOs) and student/ABET outcomes.

<table>
<thead>
<tr>
<th>CLO</th>
<th>Student/ABET Criterion 3 Outcomes</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction to Learning to Learn</td>
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<tr>
<td>2</td>
<td>Inspire to Learn</td>
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<td>3</td>
<td>Effective Communications</td>
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<td>4</td>
<td>Intelligence and Cognition Learning</td>
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<td>Project I Presentation and Report</td>
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<tr>
<td>6</td>
<td>Cognition and Knowledge</td>
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<td>7</td>
<td>Conceptualizing and Being Efficient</td>
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<td>Summary and overall discussion of the course</td>
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<tr>
<td>15</td>
<td>Project II Presentation and Report</td>
</tr>
</tbody>
</table>

7. **Brief list of topics to be covered**

   i. Introduction to Learning to Learn (1 week)
   ii. Inspired to Learn (1 week)
   iii. Effective Communications (1 week)
   iv. Intelligence and Cognition Learning (1 week)
   v. Presentations of Mini-Project I (1 week)
   vi. Cognition and Knowledge Representation (1 week)
   vii. Conceptualizing and Being Efficient (1 week)
   viii. Problem-solving Thinking Metacognition (1 week)
   ix. Critical and Analytical Thinking (1 week)
   x. Presentations of Mini-Project II (1 week)
   xi. The Engineering Design Process (1 week)
   xii. Professionalism, Ethics and the IEEE (1 week)
   xiii. Contemporary Issues in Electrical Engineering (1 week)
   xiv. Summary of the course (1 week)
   xv. Final Project Presentations (1 week)