**Industrial Advisory Board (IAB) Meeting Minutes**

**Friday, April 15, 2016**

**Lory Student Center Grey Rock Room**

**IAB members:** Tim Ash, Chuck Duey, Scott Evans, Jason Fegley, Dan Ferguson, Tom Ferraro, Jason Gentry, Jim Greener, Bob Gresham, Lance, Guymon, Matt Hilt, Susan Hunter, Steve Kommrusch, Art Lizotte, Jeannine Looney, Scott Lukes, Steve Martin, Ed Minnock, Paul Monson, Greg Nuccio, John Perzow, Chuck Quire, Pramit Rajkrishna, Mike Stiles, Richard Toftness

**ECE Department:** Tony Maciejewski Olivera Notaros, Sudeep Pasricha, Ali Pezeshki, Melissa Reese, HJ Siegel, Sid Suryanarayanan, Karen Ungerer

**Guests:** RED team member Alma Rosales, Terry Comerford

**New member:** Manish Mohanpurkar, Idaho National Labs; Pramit Rajkrishna, Arrow

1. **Introduction and Welcome IAB Guests (Lance Guymon, IAB president)**
   Lance opened the meeting, welcomed the new IAB guests, shared the day's agenda, and then turned it over to Tony Maciejewski, ECE department head, for the department update.

2. **Agenda and Department Update (ECE Department Head Tony Maciejewski)**
   Tony welcomed the meeting attendees and delivered an update on the department, highlighting the following topics:
   - ECE faculty highlights
   - Research news
   - Student updates
   - Best Paper Contest
   - Projects in the works
   - Enrollment data
   - Retention rates
   - Undergrad degrees awarded
   - Women in ECE, Engineering
   - Graduate degrees awarded
   - First Destination Survey data results

**Update on Fall Action Items:**

- **Action Item:** Alma will consider the board’s comments then follow-up with individual IAB members to validate professional formation learning modules and content.
  **Status:** Incorporated into table distributed via email

- **Action Item:** Follow-up with board to collect best practices used in industry for developing professional skills, e.g., online modules; draw on resources available through IEEE.
  **Status:** Discussing at today’s meeting.

- **Action Item:** Explore the idea of creating a cadre of students assigned in the freshmen year to flow through program together. Consider having a retreat or meeting prior to the start of school to acquaint teams.
Status: In planning stage with College of Business faculty member who teaches teamwork course.  
**Action Item:** Continue to provide enrollment data for the College of Engineering, the board is particularly interested in seeing how mechanical and ECE enrollments compare.

**Status:** Provided at today’s meeting.

Tony then helped the board prepare for Engineering Days by explaining the rubric they were asked to complete to assess professionalism in student projects.

- **Action item for next year’s judging:**
  - Allow for “N/A”
  - Provide prompting questions
  - Allow for .5 in scoring

- **Action item:** Alma requested volunteers to form a professional formation advisory team. The following board members volunteered: Dan Ferguson, Richard Troksa, Jason Fegley, Jim Greener, Pramit Rajkrishna

3. Breakout Session: E-Days Review and Homework for Professionalism Thread (Facilitators: Lance Guymon; Steve Martin, IAB VP; and Alma Rosales, Professional Formation Thread Champion)

Review homework and discuss the board’s standout examples for teaching and building capacities for professional skills. Focus areas: communication, teamwork, ethics, cross-cultural adaptability, and leadership

**Key points and suggestions:**

- Provide a short course on business practices, e.g., how do companies operate? How are financial decisions made? Help students appreciate how company decisions are made.
- Use team building games where groups compete and build teamwork skills.
- Provide leadership training and personality tests so students can learn about themselves, e.g., Strengths Finders.
- Utilize True Colors tool to help students identify what their color is – what are the strengths/weakness of that color, and how to work with other colors.
- Use Stars Wars character building.
- Start business book discussion groups.
- Invite Toastmasters presenters to help students practice giving presentations and receiving feedback.
- Provide session on “authentic leadership,” so students can discover their own authentic leadership style. Leadership style develops out of who we are. There are different ways of being a good leader.
- Provide etiquette training such as how to introduce yourself.
- Provide multinational experience to help students interact with, and learn about, people from different backgrounds and cultures.
- Provide information on career turns. This can be an opportunity for learning about management vs. leadership positions and how these positions are different; make students actually “feel” like they are in a certain situation.
- Use SCRUM – results-orientated to build teamwork skills.
- Provide team composition analysis to illustrate how differences in gender, personality types, etc., affect the composition of the team.
- Consider using role playing for cross-cultural situations.
- For communications, use “Hard Ball Manifesto” and teach conflict resolution.
• Explore a Leadership Ascent program (Jeannine), 12 sessions in the classroom, “leading” from a different role on the team.
• Create a Professional Skills Book of Knowledge.
• Build students’ debate skills.
• Give students means to obtain leadership skills through coaching and volunteering.
• Use gate modeling, such as the Eureka Ranch Gate Model, on how to “fail fast/fail often.”
• Make students aware of logical vs. emotional risk value.
• Use Strengths Finder not to only identify strengths but also weaknesses.

4. **Election (Lance Guymon):**
The board unanimously voted in favor of Art Lizotte (Keysight) to serve as the IAB vice president for the upcoming academic year; Steve Martin becomes president.

5. **Closing Remarks (Tony Maciejewski)**
Tony thanked the board, as well as Alma Rosales, for their ongoing support and efforts to advance the professional formation thread.

**ACTION ITEMS:**
• Consider IAB’s ideas for instilling professionalism:
  - Short course on business
  - Emphasis on small and big teams, team building exercises
  - Leadership training
  - Professional skills mentoring
  - Etiquette training
  - Multinational experiences
  - Allow students to “feel” different workplace scenarios
  - Share case studies/storytelling
  - Book of Knowledge
  - Gate Modeling (fail fast, fail often)
  - Logical vs. emotional risk value
• Create Professional Formation Advisory Committee to guide the professionalism thread.

The fall IAB meeting is scheduled for October 28, 2016