# **Chairs' & Center Directors' Meeting Minutes**

Date:

November 9, 2009 (12:00 to 2:00 pm)

Location:

EBU II – Room 443 Abbaschian, Reza

**Attendees:** 

Balandin, Alex

Barth, Matt Boretz, Mitch Hartney, Pat Lake, Roger

Lonardi, Stefano (for Laxmi Bhuyan)

Mahalingam, Shankar Matsumoto, Mark Parker, Linda Payne, Tom

Ravi

Rodgers, Victor (for Jerry Schultz)
Tan, Sheldon (for Walid Najjar)

Xu, Daniel

Absent:

Bhanu, Bir

Bhuyan, Laxmi Haddon, Robert Norbeck, Joe Schultz, Jerry Yan, Yushan

The agenda for the meeting is shown in Appendix 1.

## 1. Welcome and call for agenda items - Reza

Reza welcomed Daniel Xu (Director of UC Light), Sheldon Tan (Associate Director of Computer Engineering), Stefano Lonardi (for Laxmi) and Victor Rodgers (for Jerry) to the meeting. Reza stated that last week's SC-RISE event at CE-CERT went very well and thanked Matt Barth and his staff. Matt mentioned that an important part of the event was the Summit Meeting which had about 30-40 attendees including representatives from the Riverside's Mayor's Office and Public Utilities. Reza indicated that the Tohoku University guests were very impressed with the event and want to develop cooperative programs with BCOE faculty. There were about 200 attendees at the SC-RISE ribbon-cutting ceremony after the Summit Meeting.

Reza stated that David Fairris and Gladis Herrera-Berkowitz will be making a presentation during the last part of the meeting on iEVAL.

Mitch requested the addition of the topic Research Ethics to the agenda.

# 2. Approval of Minutes - Pat

The minutes of the October 12<sup>th</sup> Chairs/Directors meeting were unanimously approved.

# 3. Faculty Recruitment - Reza

Reza stated that the EVCP has approved the recruitment of four new faculty for BCOE. One of these positions is designated for the founding director for BCOE's Civil Engineering program. The EVCP left open the areas for the other three (junior) positions. Reza distributed a Civil Engineering/Construction Management plan that BCOE drafted. This document indicates that there are four UC campuses that offer Civil Engineering. Enrollments in these four UC programs are: 400 PhD, 350 MS and 1,800 Undergrad students. There is high local interest for a Civil Engineering program. Reza pointed out that the Inland Empire is projected to grow significantly and will eventually be the second most populous county in California (behind LA). Therefore, the initiation of BCOE's Civil Engineering program is timely. BCOE's Civil Engineering program will focus on Sustainability and will have an MS in Construction Management component. BCOE's Construction Management program will be different from other programs that are housed in Schools of Architecture or Business. The founding director of BCOE's Civil Engineering program will need to develop an undergrad and then graduate education program. This position will be housed in the BCOE department that is most appropriate for his/her area. It is expected that a separate Civil Engineering department will not be needed at least for the near term. Mark added that Sustainability can include urban infrastructure, energy, water, transportation, etc. Reza hopes that the Civil Engineering program will reach critical mass in about five years with perhaps 10 faculty and 10 Faculty-Practitioners. These Faculty-Practitioners would be similar to Clinical Faculty at Medical Schools. Reza envisions a program in Construction Management that would include engineering and business classes. The final year of the MS could be done off-site (i.e., on-line). The Chairs asked if BCOE was spreading itself too thin with its relatively new BIEN department, new MS&E program and now a new Civil Engineering program. Reza responded that BCOE's goal is still 140 faculty and that the only way to add new faculty lines is to add new, complementary programs. He envisions that Civil Engineering faculty will have appointments in the existing BCOE departments which should be beneficial to those departments. Ravi suggested that the program be named Sustainability and Civil Engineering to accentuate its non-traditional focus.

Reza asked Matt to chair the search committee for the Civil Engineering position. Matt responded that he will work with Mark on this effort since Mark is the only BCOE faculty member with a Civil Engineering degree.

Reza reminded participants that BCOE will now have to provide 100% of all Initial Complement (IC) funding for new faculty hires. The campus no longer provides any IC funds since most Indirect Cost Recovery (ICR) is now being returned to the Colleges. As such, more ICR will be coming to BCOE departments so Reza expects departments to provide some of these IC funds.

After discussion, it was decided that the three junior faculty hires would be in ME, CEE and BIEN in the areas of Energy and Materials. It was hoped that one of these hires would be in an area related to BCOE's new Solar Center (SC-RISE). Also, it was noted that there could be a joint appointment between CSE and BIEN in computational materials. Search Committees will need to be formed in each of the three departments with one representative of each committee on an overall College level Search Committee (i.e., two-layer system). In order to move quickly with these recruitments, the next Chairs/Directors meeting was moved up to Monday, November 16<sup>th</sup>.

## 4. Graduate Education - Mark

Mark distributed a summary of BCOE Grad Student Enrollments and Degree Awards from Fall 2008 to Fall 2009. He noted that BCOE has a total of 435 graduate students currently enrolled with another 35 on filing fee status (for a total of 470). Students can be on filing fee status for one quarter only. A second handout charted BCOE Graduate Degrees Offered from FY 99/00 to FY 08/09. Mark noted that the number of degrees awarded decreased last year but this may be due to a higher number than normal on filing fee status. GradSIS data indicates that about 500 applications to BCOE for FY 09/10 have been initiated to date. The Grad Division has funding to bring potential CSU grad students to UCR for visits.

# 5. Undergraduate Education - Ravi

Ravi stated that BCOE received one of three national ABET awards for Diversity efforts this year. Also, he noted that Suzanne McCusker is leaving BCOE Student Affairs so the number of undergrad students per Advisor will rise to 575-600 until a replacement is hired. Lastly, he noted that BCOE is doing a pilot Engineering Design effort this year for Freshmen and Community College transfers on windturbines.

# 6. Move to iEVAL - David Fairris and Gladis Herrera-Berkowitz

David announced that starting Fall 2010, course evaluations will be processed on-line using iEVAL only. Paper evaluations will no longer be available. An email to UCR faculty with this information will be sent today or tomorrow. The main reason for this change is to save about \$50K per year. The major drawback to iEVAL is lower response rates but David's office will be providing incentives including faster availability of course grades to responders and raffles for parking permits and gift certificates. Also, he noted that the benefits of on-line evaluations include higher quantity of written comments than paper evaluations. Overall ratings are similar between on-line and written evaluations. Due to this change, David's Office will no longer be able to edit evaluation comments from students.

David also discussed the recent WASC Team visit. The WASC Team mostly focused on CNAS and CHASS since BCOE and SOBA already go through professional school accreditations. At the conclusion of their visit, the WASC Team made three recommendations: close the loop on learning outcomes and assessment; institute learning outcomes and assessment for General Education courses and institute learning outcomes and assessment at the Graduate level. Initial reactions from WASC indicate that they probably won't require learning outcomes and assessment for UCR Graduate programs.

## 9. Other Matters

Due to time constraints, the topic of Research Ethics was postponed to the next meeting.



# Chairs' & Center Directors' Meeting

# November 9, 2009 Agenda

Engineering Building Unit II – Room 443

1.	Welcome - Request for Agenda Items from the Floor	Reza
2.	Approval of Minutes from October 12, 2009 Meeting	Pat
3.	Faculty Recruitment	Tom
4.	College Meeting/Staff Appreciation	Reza
5.	Graduate Education/Recruitment	Mark
6.	Undergraduate Education	Ravi
7.	Move to iEVAL	David Fairris/ Gladis Herrera-Berkowitz
8.	Other Matters	

The next scheduled meeting will be

Monday, November 23, 2009

Please note: Meetings will be held in EBU II - Room 443

# Civil Engineering/ Construction Management

# The Challenge & Vision

The civil engineering profession has been at the forefront of the rapid urbanization that is occurring in the world today. Clean water, safe buildings, and extensive transportation networks are the results of its influence.

At this time, however, the expanding world population coupled with global competition and our awareness of limited resources has signaled that a new paradigm is needed if we are to meet our future needs for continuing development. The Inland Empire, as the fastest growing in California, is confronted with these realities. To address these challenges, the Bourns College of Engineering at the University of California, Riverside seeks to establish a new civil engineering program that will emphasize sustainable development in its educational and research mission.

The vision for the Civil Engineering program at the University of California, Riverside is to become a national leader in sustainable civil engineering education and research, partnering with business and government to develop the needed new paradigm for future urban development, particularly in inland Southern California.

The average commute time to work in the Inland Empire is one of the longest in the country. In addition, all of Southern California (and the entire southwestern United States) is experiencing a water supply crisis. Water rationing is being implemented by a number of water agencies. We believe that these issues will continue and therefore *two of our principal areas for research and educational emphasis will be towards sustainable water supply and efficient transportation systems*. These areas are consistent with the mission of the Bourns College of Engineering to be a catalyst for growth in the Inland Empire.

## Plans

BCOE seeks to establish a new civil engineering program that will emphasize sustainable development in its educational and research mission.

Our initial plan is to offer a typical civil engineering B.S. program with additional emphasis on project/construction management. Only four UC campuses (UCB, UCD, UCI and UCLA) offer undergraduate degrees in Civil Engineering. The undergraduate enrollment in these four campuses is around 1,800 students, see the following charts. In addition, several of the CSUs also offer Civil Engineering degrees, with undergraduate enrollment reaching 5,500. For the proposed Civil Engineering Department, we expect around 500 undergraduate students in its maturity. This number might be an underestimation, as the College frequently receives inquiries for CE degrees. Moreover, the College had already identified and invited over 30 top

construction and transportation managers for an April 2008 planning meeting. They were all supportive and we expect them to provide funding for the planning and implementation phase. Some of these companies may also allow their practicing engineers to serve as "Professors of Practice" in teaching applied courses, such as GIS Surveying and Mapping.

At the graduate level, we would offer professional M.S. degree tracks in Environmental Engineering, Transportation Systems Engineering, and Construction Management as well as a research-oriented Ph.D. degree program focusing on sustainable infrastructure systems. We would also offer a combined five-year B.S./M.S. program that would feed into one of the professional M.S. degree tracks. The professional M.S. degree tracks would address a recent policy statement by the American Society of Civil Engineers (ASCE) that states that an M.S. degree should be required for licensed civil engineers. The enrollment at the Masters level for the four UC campuses with CE departments is close to 350. These four campuses also have over 400 PhDs. Our projection is that within ten years, the CE program will have around 100 Masters and 100 PhD students.

The Civil Engineering program is expected to have twelve ladder rank faculty at its maturity. In addition, the program is expected to have ten "Professors of Practice".

# The Program

Civil engineering professionals must be trained broadly. They require fundamental science and math knowledge, practical engineering skills, management skills, innovativeness, and teambuilding abilities. In addition, because of the complexity of civil engineering systems, depth of knowledge in a specialty area is often required. Because of the breadth of topics that are needed, and limited ongoing "real-world" engineering practice that university faculty members often have, our plan is train a new generation of engineers as a partnership between the university and the professional community.

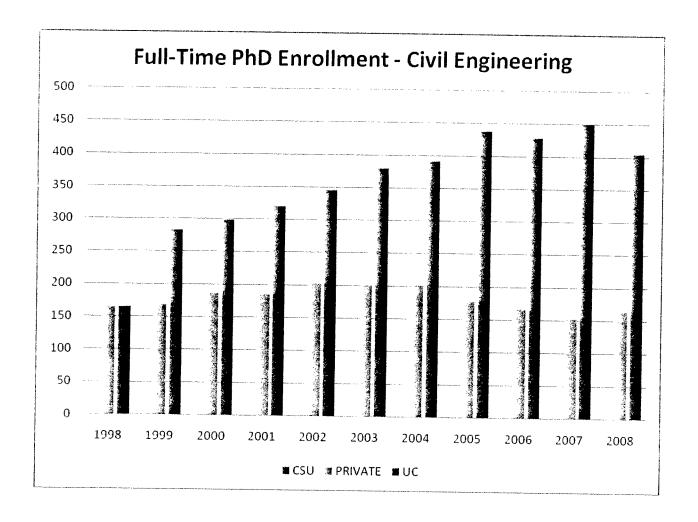
To prepare a better-trained workforce, we seek to interact with the professional community to coordinate the teaching of practical engineering skills such as surveying, computer-aided design (CAD), and geographical information system (GIS) mapping/analysis. Practicing professionals can provide significant insights and practical "tricks of the trade" that university professors are often unable to provide.

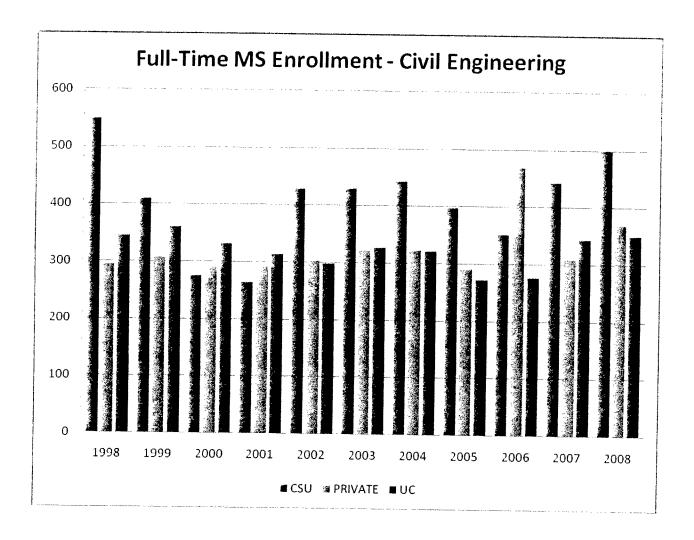
Further, we would like all of our civil engineering students to have real-world training via an engineering internship (one quarter part-time AND one summer full-time). To accomplish this goal, we would need to rely on the local professional community to provide these opportunities for our students.

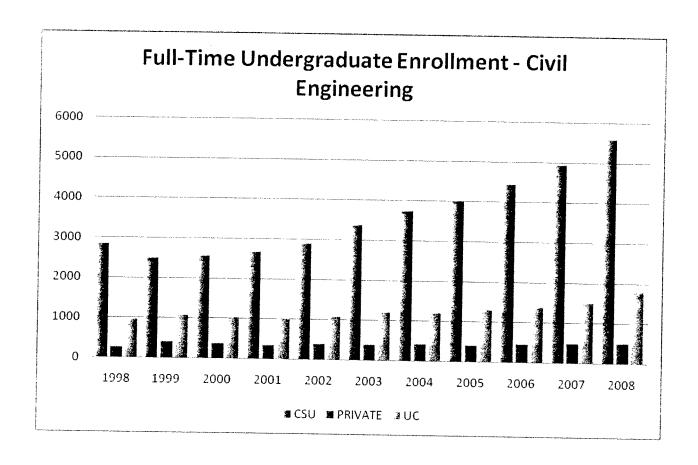
Engineering work is also a succession of projects. Thus, project management skills are invaluable, if not essential, for a successful engineer. Skills in planning, organization, resource allocation, time management, finance, together with an understanding of quality and quality

management are important. In coordination with the A. Gary Anderson School of Management, a core suite of engineering management courses will be taught.

Faculty members at research universities such as UC Riverside, devote much of their effort on generating new ideas and technologies that may have significant impact many years into the future. For this planned civil engineering program, we will seek innovative, forward-thinking faculty members who can make valuable contributions to sustainable urban infrastructure, and who understand the importance of collaboration and teamwork.



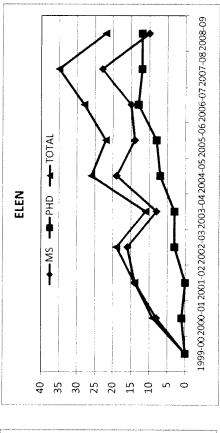


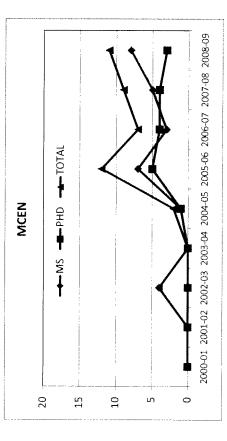


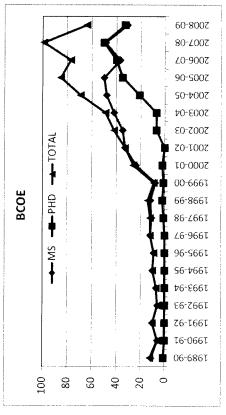
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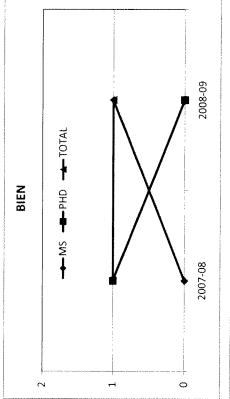
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M.S. Degrees Awarded	S60	0	0	5	4	3	12
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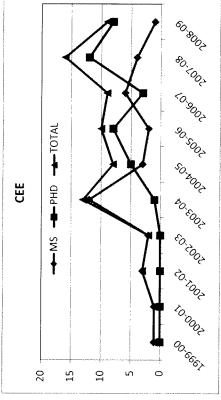
# **BCOE GRADUATE DEGREES AWARDED**

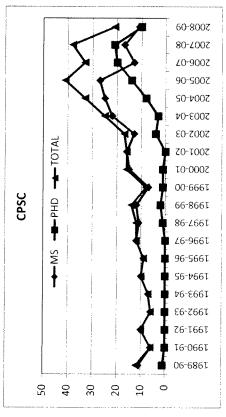














# Campus Move to iEVAL

- Starting Fall 2010 Course evaluations will be processed online with iEVAL.
  - iEVAL has been available to the campus on a voluntary basis since 2006.
  - As of Spring 2009 63% courses used iEVAL.
- Budget is preventing continuation of the two modes of course evaluation on our campus.
  - Paper evaluations cost \$79,500 per year process required 3 employees that scanned and typed all evaluations for 8-10 weeks.
  - iEVAL costs \$26,800 per year and can process the evaluations within a few days.
- The proposal to move to iEVAL was vetted through the Academic Senate (CAP, Educational Policy, Graduate Council, Faculty Welfare) and approved to move forward.
- iEVAL drawbacks:
  - Student Response Rate is Lower 2008-2009 iEVAL 49% Paper Evaluation 75%.
    - Prior to using iEVAL AGSM's response rate was 64% Response rate using iEVAL is 57%.
    - Prior to using iEVAL Math's response rate was 60% Response rate using iEVAL is 49%.
- iEVAL benefits:
  - o Insures that only enrolled students submit evaluations.
  - iEVAL frees class time and allows students the opportunity to reflect on class experience and provide constructive feedback.
  - Quantity of written comments is significantly higher:
    - 08W comparison of courses with enrollment of 100-199 showed 1742 words used in the comments provided on paper evaluations vs 3925 used on iEVAL.
    - 08W comparison of courses with enrollment of 200-299 showed 2136 words used in the comments provided on paper evaluations vs 6974 used on iEVAL.
  - Course evaluation Reports will be available to instructors at the end of finals.
  - Departments will get online access to iEVAL results.
- In response to the lower student response rate, this quarter we will offer the following student incentives and marketing:
  - o Grade Incentive:
    - Students who complete a course evaluation will have access to the grade as soon as it is submitted by the instructor. Grades for courses not evaluated will not be available until the official University posting date.
  - E-mail reminders from OID.
  - Reminder on Growl with a direct link to iEVAL.
  - o Reminder on Rspace.
  - o Reminder on iLEARN.
  - Reminder on computers in campus computer labs.
  - Posters around campus.
  - Raffles for parking permits, gift certificates.

# Dear Colleagues:

I am writing to inform you that, primarily for budgetary reasons, starting Fall 2009 all UCR course evaluations will be administered online through the iEVAL system. UCR has used online evaluations on a voluntary basis since Spring 2006; and as of last spring 63% of courses utilized this system for evaluating courses and instructors. An analysis of the iEVAL system by an *ad hoc* Committee of the Academic Senate revealed that students provide more detailed written comments online and that ratings of instructors are relatively comparable across the online and paper processes. Besides budgetary savings (and, of course, reducing our environmental footprint), moving to an online system saves class time and allows for faster processing time – for example, evaluation results will now be available to instructors at the end of finals.

As noted by the Senate *ad hoc* committee, a significant drawback to online evaluations is that to date student response rates are somewhat lower for online evaluation as compared to paper evaluations administered in the classroom. Undergraduate Education has been working with the Academic Senate to transition into this system and to address the issue of the lower student response rate. In an effort to improve the response rate, the Office of Instructional Development will launch a marketing campaign to educate students about the value of course evaluations and the importance of student participation in this campus process. This Office has also arranged for the following incentives for students to participate:

- Allowing all students who submit a course evaluation to gain access to their grade for that particular course as soon as the grade is submitted by the instructor. Grades for courses that are not evaluated by students will only be available on the official UCR grade post date (Fall 2009 January 2, 2010; Winter 2010 March 29, 2010; and Spring 2010 June 21, 2010). Thus, every student who does carry out an online course evaluation will be rewarded by early access to their grade for that course.
- Providing a raffle for student participants with prizes such as a parking upgrade to lots 6 and 13 and gift certificates.

The faculty is encouraged to assist in the promotion of student participation in iEval by:

- 1. Conveying iEVAL information to students in your courses.
  - a. Dates the system is available for evaluation: Fall 2009 11/20-12/4; Winter 2010 3/1-3/12; Spring 2010 5/24-6/4.
  - b. iEVAL link www.ieval.ucr.edu
- 2. Including a direct link from your course iLEARN site to iEVAL. Instructions on how to do this will be sent by OID.
- 3. Announcing iEVAL, and taking a few moments to explain the value of student feedback to the campus mission of instructional excellence.
- 4. Refraining from personally distributing final course grades (via the "grade view" screen on iLEARN for example) to all students in a course, regardless of their participation in course evaluations.

More details on how to use of iEVAL for evaluating courses will be forthcoming from Gladis Herrera-Berkowitz, Director of the Office of Instructional Development, later in the fall. If you have any questions, Gladis may be reached at gladis.herrera-berkowitz@ucr.edu.

Thank you for your cooperation,

David Fairris, Vice Provost of Undergraduate Education