

University of Wyoming
College of Engineering and Applied Science
Department of Computer Science
Advisory Board Meeting
Minutes for Spring 2009 Meeting
May 1, 2009

Agenda: Attached (additional materials presented at meeting available electronically at the following location, <http://www.cs.uwyo.edu/~hamann/AdvisoryBoard/>)

Attending: Henry Bauer, Joe Campbell, Dan Duffek, Jerry Hamann, Sherrie Merrow, Steve Roach, Don Sniffin

Absent: Mike Golden, Brady Kraft, Jim McKenney, Mike Myer

Continental Breakfast

Welcome and Overview of the Agenda

Dr. Jerry Hamann welcomed the board members and reviewed the proposed agenda for the day. The availability of handouts and auxiliary information from the Department website was noted, beginning with the dedicated link at <http://www.cs.uwyo.edu/~hamann/AdvisoryBoard/> .

The schedule for the 2009 Undergraduate Research Day was provided, with potential for board members to attend if still in town.

Approval of Minutes from September 2008 Meeting

The draft minutes from the Fall 2008 meeting were reviewed and approved with minor corrections noted. For the current and future meetings, the group agreed that it would be best to distribute a first draft of the meeting minutes very soon after the meeting in order to facilitate their use. Electronic distribution was favored by all in attendance.

Discussion of Board Charter

The fourth draft version of the Department of Computer Science Advisory Board Charter was reviewed and discussed, resulting in the following fundamental modifications:

- Use of the abbreviation CSAB should be removed, in order to avoid conflict with national use by the Computer Science Accreditation Board.
- The length of continuous membership to the board was revised to read as follows: "The membership term shall be four years. Members shall be eligible for two consecutive terms followed by a one year hiatus before being re-eligible for appointment."
- The detailed description of typical procedures for board meetings and agenda construction was reduced substantially.
- Details for distribution of meeting minutes were enhanced to include the construction of a condensed summary of minutes to be shared with the College of Engineering and Applied Science National Advisory Board.

With these modifications, the draft charter will be distributed electronically to board members for final review and acceptance.

Overview of CEAS Development and Communications Activities

Sherrie Merrow, Director of Development and Communications for the College, introduced her staff: Baillie Miller and Thyra Page. Sherrie then presented the following items (available for electronic review):

- A PowerPoint Overview of the Office of Development and Communications
 - Responsibilities and Staff
 - College Gift History
 - Fiscal Year 2009 Fundraising Priorities and Endowment Focus
 - Currently Identified Projects in Computer Science
 - Facilities Improvement
- The College Fiscal Year 2010 Case Statement
- Summary of College Communications Schedule

During the discussion of the College Gift History, a question was raised regarding the number of corporate matches that are typically associated with individual gifts. Baillie described the informational resources available through Development and accepted the task of researching the question. Recent changes to the operating procedures for UW Foundation investments were discussed briefly, in light of the effects of recent economic conditions. The Winter 2009 issue of Foresight, which prominently featured Computer Science, was shared with the board, and Thyra was thanked for her efforts in producing the magazine.

Status of the Department, College, University and State

Jerry provided an overview of the “state of the Department, College, University and State” (slides available for electronic review). Featured were student highlights, including the recent ACM Collegiate Programming Contest and North Central Regional Cyber Defense Competition, as well as the formal development of a local chapter of the Upsilon Pi Epsilon Computer Science Honorary. In response to board member questions regarding enrollments and allocation of resources, Jerry provided an introduction to the information available from the University Office of Institutional Analysis (see web links on the Board website).

Continuing with the Department status, recent faculty activity with tenure and promotion, contracts and grants, and fellowships were discussed, and an update on the on-going search for a new assistant professor was given (in excess of 230 applicants, area of expertise focused on high performance computation and systems, three applicants scheduled to arrive on campus in the next two weeks for interviews). The impending retirement of Office Associate Becky Riley was announced, with accolades for bringing a cordial and welcoming environment to the Department Office.

Continuing with the College status, the on-going challenges due to dramatically increased enrollments in energy-focused programs of study were introduced. College initiatives with investigating a formal faculty mentoring program were described, and the

shared-governance initiatives represented through the newly composed Staff Council and Faculty Council were presented.

With regard to University and State issues, the effects of the global economic downturn were reflected in a review of the Wyoming Consensus Revenue Estimation Group (CREG) January 2009 Forecast for FY 2009-10 General Revenues. Discussion included operational impacts, both actual and expected, within State and University units due to the projected reduction of \$650M in revenues available to the budget process.

Curriculum and Concentrations, ABET Preparation and Visit

Jerry presented an overview of the status of undergraduate curriculum issues, including the on-going efforts to prepare for ABET visits during Fall 2009 (all programs in the College except Computer Science) and Fall 2010 (Computer Science) (slides available for electronic review). The new opportunities possible through the Interdisciplinary Computational Science Program initiative were then discussed, with advent of the undergraduate minor beginning in Fall 2009.

How the Computer Science Advisory Board can best interface with the ABET accreditation process was then examined. Jerry provided a recent article from the *Journal of Engineering Education*, which describes a survey of industry advisory board operations and effectiveness, to stimulate conversation. After preliminary discussion, board members were encouraged to further examine this topic during the afternoon discussions. Steve Roach and Henry Bauer, who have both participated extensively in accreditation visits, encouraged one or more faculty of the Department to attend ABET program evaluator training as soon as possible. Industrial member participation was also encouraged.

Working Lunch

The group moved to a working lunch and was joined by several faculty members (Allyson Anderson, Tom Bailey, Kim Buckner, Jim Caldwell, Jeff Van Baalen). Don Sniffen led a round of introductions and facilitated the conversation. Kim Buckner asked the board members if they had suggestions for how to emphasize to current students that “everything they are learning will be valuable and important to them.” Teaching the theory and fundamental concepts was well accepted by the faculty to be the primary goal, with opportunities to investigate contemporary languages, design methodologies and application platforms important, but not at the level of industrial certification coursework.

The awkwardness of “theory versus application” was also presented by Jeff Van Baalen, in the context of the Senior Design project course sequence, where a tenuous divide separates projects which are very application focused versus research projects conducted in parallel with faculty research interests.

Participants voiced concerns with societal perceptions of the “geekiness” and “cloistered cubicle” setting of science and technical professions, which appear to be impacting the

recruitment of potential undergraduates, particularly in computer science. Expectations of potential employers of Department graduates were discussed in some detail, with a summary conclusion that a survey of companies taking part in the Fall Career Fair should be conducted if possible. Dan Duffek offered a view of the potential difficulties with obtaining feedback from the interview process with regard to how well student candidates match industrial expectations.

When asked what the faculty and staff felt the board should be doing, the initial discussion revolved around leverage and influence which might be provided by the board in discussions with the Dean regarding resources provided for the Department. Significant concern was voiced concerning the upcoming effects of budget cuts, which will only amplify the reductions already felt in staff and support budgets.

Discussion moved to the Interdisciplinary Computational Sciences program and the opportunities provided to Department students (ability to focus upon an application area) as well as the potential to diversify the participation of the greater campus community in Department coursework. Issues involving the proper preparation of students from other disciplines included effects upon Department resources to provide appropriate coursework. Again, the concerns of the tug-of-war between teaching fundamentals versus providing just-in-time niche application support were discussed.

Update on Action Items

Following lunch, Jerry provided a brief overview of progress on action items identified during the September 2008 Advisory Board meeting.

- With regard to peer mentoring for faculty, the College is moving forward with a college-wide survey of peer mentoring practices and needs. Dr. Patricia Colberg, in Civil Engineering, is tasked with identifying the needs and fleshing out guidelines for formalizing peer mentoring across departments.
- The degree to which all Department faculty are actively participating in professional development and design of program outcomes for undergraduate and graduate students is currently reflected in part through the committees established to develop the documentation for accreditation as well as the graduate recruitment and examination processes. Participation of faculty is broadly spread across these functions, both through committee assignments as well as providing input to the decision processes.
- The issue of interdisciplinary communication opportunities for students is reflected in several action items found in the current College strategic plan. The Dean is strongly invested in formalizing the written and oral communications curriculum elements, including conventional coursework to lay the foundation for professional communication as well as capstone design experiences which include interdisciplinary teams where feasible.

Discussion of Computer Science Industry Information Day

The concept of an "Industry Information Day" has grown out of phone and email conversations with board member Jim McKenney. Jerry asked the board members to consider ways in which they would like to interact with current and prospective

undergraduate and graduate students. For example, Dan Duffek met with students from the local ACM chapter on the evening prior to the current board meeting, and found the interaction encouraging. In particular, the ability to provide immediate responses to student inquiries regarding professional opportunities, as well as scholarship funds, lends some credence to such forums. Board members discussed the possibility for amplifying the opportunity through regional forums which might combine student bodies from CSU, CU and UW, for example. Encouragement for programs which include prospective students down through junior high or middle school levels was voiced by several members.

Revisiting the issue of board participation in the ABET process, interest was expressed on several fronts: gaining familiarity with the ABET process, regularly reviewing curriculum developments, and meeting with the ABET visiting team during the on-campus visit. In order to initiate this process, Jerry and Don Sniffen accepted responsibility for providing the board members with an ABET 101 mini-course, in conjunction with the Fall 2009 Board Meeting. Steve Roach and Henry Bauer indicated that substantial resources are available on the ABET website.

Action Items, Timing and Tentative Agenda for Next Meeting

The timing for the next board meeting was established in concert with the Fall Career Fair at UW. Tentative Action/Agenda items for this Monday, September 21, 2009 meeting were delineated as follows:

- Presentation by Dean Ettema
 - Overview status of budget situation.
 - Provide evaluation of Department within the college milieu.
- ABET 101 Mini-Course
 - Complemented with appropriate pre-study materials.
 - Provide “the essential facts” regarding ABET, curriculum, and process.
 - Review the program draft objectives.
- Enhance Faculty Participation in Advisory Meeting
 - Included reports by faculty as well as continue open “working lunch” forums.
- Address Potential Additions to Board Membership
- Provide Trip Report by Development Office and Department Head to Constituents in the Pacific Northwest
- Include Reports and Interactions from Student Groups
 - ACM Chapter
 - UPE Honorary
 - Summary of survey information as available from ABET review and others.
- Examine Opportunities Such as a “Reverse Career Fair” Reception

Closing, Reception with Graduate and Undergraduate Students

The formal agenda for the meeting was then closed, and members adjourned to meet informally with a group of graduate and undergraduate students.

AGENDA May 1, 2009
College of Engineering and Applied Science (CEAS)
Department of Computer Science (COSC) Advisory Board

Host: Jerry Hamann, Department Head

Participants: COSC Advisory Board

Friday, May 1, 2009

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| 8:00 – 8:30 a.m. | Arrive Department:
Continental Breakfast (EN 4084) |
| 8:30 – 9:00 a.m. | Welcome
Approval of September 30, 2008 minutes
Approve/Modify Agenda for 5/1/2009
EN 4094 |
| 9:00 – 9:30 a.m. | Approval of Charter
Facilitator: Don Sniffin |
| 9:30- 10:00 a.m. | Sherrie Merrow and Staff
Overview of CEAS Foundation Efforts |
| 10:00 – 10:30 a.m. | Status of UW, College, Department, and State Economy
Facilitator: Jerry |
| 10:30 – 10:45 a.m. | Break |
| 10:45 – 11:45 a.m. | Discuss ABET Visit, Curriculum and Concentrations
Facilitator: Jerry |
| Noon to 1:00p.m. | Working Lunch
Topic: Meet and talk with COSC Faculty
Facilitator: Don
EN 4094 |
| 1:00-1:15 p.m. | Break |
| 1:15-2:00 p.m. | Action Items Update
Presenter: Jerry
EN 4094 |
| 2:00 - 3:00 p.m. | Discussion of Computer Science Industry Information Day
Facilitator: Jerry |
| 3:00 – 3:15 p.m. | Break |
| 3:15 – 4:30 p.m. | Action Items and set date for next meeting of the
COSC Advisory Board
Facilitator: Don |
| 4:30 – 4:45 p.m. | Break |
| 4:45 p.m. - | Reception: COSC Graduate, Undergraduate Honor Students |

Saturday, May 2, 2009

COSC Student Presentations at Undergraduate Research Day

Presentations will be scheduled from 1:00 – 5:30 p.m. Schedule will be provided when available