Student Learning Outcomes Assessment Summary

Construction Management, A.A.S.
Community and Technical College
AY 16-17 & AY 17-18

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- Assessment information collected

  A. Specific exam questions continue to be tracked:
     1. Students interpreted and evaluated actual competitive bid results for the renovation of
        the third floor of this building (604B) in which our classes are held and other local
        construction projects for which documents are available via our membership in the
        local branch of the Associated General Contractors (AGC).
     2. A news article about a contractor's termination from a fairly high profile local
        construction project is included in a final exam and students are required to comment
        on contractual obligations and explain the role of scheduling, insurance and bonding
        in this situation.
     3. A series of construction cost estimating questions requires development and evaluation
        of productivity factors which are applied to information determined by quantity material
        takeoff and then priced with composite labor rates which are also derived via exam
        questions.
     4. Unique aspects of special logistics for construction in remote Alaskan locations along
        with less-exciting but critical allowances for load restrictions on local roads during
        spring break-up were addressed in freight cost scenario calculations.
     5. Building foundation design and construction requirements in permafrost soils, a topic
        which is not covered in our text books, is incorporated into questions on tests and
        worksheets in several courses.

  B. We also continue to monitor student’s instructor opinion survey and course evaluation
     comments and we solicit feed-back on course content relevancy to student’s current work
     duties and also to experiences that they encounter during their Construction Management
     Internships.

- Conclusions drawn from the information summarized above

  A. Test results indicate fairly consistent learning of most of the targeted topics, however
     learning outcomes for students with previous construction experience appear generally to
     exceed those without. So we are mindful that there will always be room for improvement
     as we evaluate student experience and adjust subject matter delivery methods.
B. Students continue to express satisfaction with course delivery and provide positive feed-back from internship experiences and other employment experiences – as many are working fulltime while taking classes.

C. Design and construction information for recent and historical Alaskan projects, including the trans-Alaska pipeline, continues to generate interest in our unique cold climate requirements along with the customary construction management topics found in our textbooks.

### Curricular changes resulting from conclusions drawn above

A. We continue to use actual construction documents from local projects to take advantage of “applied” examples of such things as Owner Furnished Owner Installed security equipment in a local bank construction project or UAF’s incorporation of a pre-negotiated environmental controls subcontractor into an otherwise competitive bid solicitation for renovation of the building space in which our program’s classes are taught. These local real-world examples are great supplements to the often-generic textbook examples.

B. We continue to emphasize the roles and responsibilities of project participants and the influence of various project delivery systems in our introductory courses, as it helps our students understand the importance of the contractual specifics covered in later courses.

C. We continue to benefit from guest lecturers who help us illustrate milestone construction management topics in their personal work experiences. This group includes construction contractors, professional engineers & architects and business professionals, including David Hale (2013 SOM Business Leader of the Year) who continues to communicate interesting nuances of construction insurance and bonding which nicely supplements the information available in our course text books.

### Identify the faculty members involved in reaching the conclusions drawn above and agreeing upon the curricular changes resulting

The Construction Management program greatly benefits from excellent and experienced Adjunct Faculty members whose daily work often involves those real-world examples which help them illustrate and explain many of the aspects which they are teaching in our courses. Some of the changes above have been discussed and reviewed with our faculty as time and circumstances allowed, including the following individuals:

- **Steve Geraghty, P.E. (Professional Civil Engineer), Adjunct Faculty**
- **Ron Moore, P.E. (Professional Mechanical Engineer), Adjunct Faculty**
- **Jeff Howe (OSHA Certified Safety Instructor), Adjunct Faculty**
- **Christoph Falke, AIA (Professional Architect), Adjunct Faculty**
- **Galen Johnson, P.E., Professor, CM & DRT Program Coordinator**