Curriculum Renewal and Program Review
Annual Summary Report
School of Environmental and Natural Resource Sciences
(SENRS)

Blasting Techniques

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for Linda Skilton, Dean SENRS

Blasting Techniques

Program: Blasting Techniques **Co-ordinator:** Bill Smith **Date:** February 29, 2012

B. Curriculum Strengths and Challenges

Summarize the curriculum strengths and challenges identified by the team.

Strengths:

- Industry contacts have increased dramatically in the last year
- Instructors have extensive field experience.
- Increased student interest

Challenges:

- Working with blasting contractors to get more “hands on” experience
- Losing students because they fail one class, there is no way for a student to re-take a class during the current school year. Having to pass 100% of the course on the first try presents a challenge to work place level students.
- Ensure students have a clean criminal record check before starting the program, as quarry requires it week 2 for curriculum delivery.

C. Action Plan

Identify priority actions for the next year and the rationale for their inclusion. For each, indicate the project lead, and the proposed timelines for completion.

- Pour cement pad to use as drill and blast simulator on campus, Project lead-Bill Smith, to be completed by Oct. 2012
- Develop “dummy” initiation systems for use at the blast hole loading site on campus, Project lead-Bill Smith, to be completed by Oct. 2012
- Attend Canadian Institute of Mining conference to expand industry contacts
- Develop contacts for underground mine tour.

D. Deferred Actions

Record any issues that will need to be monitored, researched, or deferred for future action.

- Determine process to ensure students receive information about the criminal record check before starting; then implement communication plan.

Common Themes

1. Infrastructure Needs

All programs indicated there is a need to update existing equipment and facilities. Several programs share equipment and with the increased use and demand for these pieces, there is extensive wear and tear on most of the equipment. The cost to repair a lot of the equipment is expensive. Storage space also continues to be an issue.

Action:

Continue to advocate for capital equipment and a space plan that includes a designed area to store, sign out, monitor and maintain existing equipment.

2. Industry Support

Various members of the Advisory Committees have requested lists of needed equipment to see if they could donate any of their surplus pieces.

Action:

Coordinators have to be proactive to make the requests for donations.

3. Program Quality

It was identified that some of the protocols and procedures used, and the supporting materials, are outdated. There is the challenge to find time to update curriculum at the same time as moving forward to adopt corporate initiatives such as blending learning. There is also a need to develop new skills around assessment and evaluation, and the use of new technology in the learning environment.

Action:

Faculty are making a conscious effort to ensure relevance and currency in their curriculum, but they need professional development to incorporate different learning methods. There needs to be more support for individual assistance to redesign curriculum and its assessment, to embrace the advancement of technology, and to learn how and where to use technology.

4. Human Resources

There has been an increased use of contract faculty, primarily due to enrollment growth, which can potentially compromise program content as the faculty may change from semester to semester. There have also been several retirements, whose specialized skill sets needs to be replaced.

Action:

Develop a hiring plan to replace the skill sets required as SENRS moves forward to start new programs and update existing ones. Five fulltime faculty and one full time instructor are in the approved plan for 2012/13.

5. Articulation/Transfer Agreements

Program coordinators continue to be active in engaging in opportunities to create articulation agreements across colleges and universities. With increased competition for a shrinking student population, and the desire of employers to have graduates with both technical, applied skills as well as advanced learning, the environment is favourable to create more pathways for learning.

Action:

Coordinators identify potential articulation opportunities to the Chair, who will make the connections and initiate dialogue to establish agreements. Once established, a clear visual aid for marketing these opportunities to students needs to be created.