Section 1: Charge

Evaluate and develop actionable initiatives that will significantly enhance Mines’ continuing and executive education enterprise, which is operated through the Office of Special Programs and Continuing Education (SPACE).

Section 2: Relationship to Strategic Plan

Goal 3: Build and diversify revenue streams and auxiliary enterprises.

Strategies

- Build upon advancements in board authorities that define our relationship with the state.
- Expand institutional support and infrastructure development through alumni outreach and Foundation initiatives.
- Establish new or expand continuing education and executive education enterprises that enhance the reputation, global reach, and financial security of Mines.
- Continuously investigate new technologies and market trends that threaten core revenues, and respond to best leading practices that maintain our preeminence in instructional delivery.
- Diversify federal research funding across multiple agencies while increasing corporate and private research support.
- Support research innovation through an enhanced technology transfer program.

Section 3: Membership

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Section 4: Summary of deliberations

The strategy on expansion of continuing and executive education enterprises embedded under Goal 3 in the Strategic Plan arises from a belief, and the benchmarking of peers, that Mines has an opportunity to leverage itself more effectively, and more profitably, in the continuing education market. Accordingly, Vice-Presidents Volpi and Middleton met in early Spring to discuss the issues involved and they configured a Task Force to address the operational complexities that are perceived to exist at Mines.

At much the same time, VP Middleton delivered a presentation to the Budget Committee focusing on the portfolio of Strategic Enterprises, and this presentation highlighted many of these issues and complexities. The presentation may be retrieved from:


Subsequent to this presentation, the work of the Task Force was partitioned into four principle areas, and was simultaneously absorbed into the work of the Executive Council as a Strategic Initiative for the university.

The four areas included:

- Developing a business model for Continuing Education
- Determining curriculum and content for the Continuing Education portfolio
- Engaging faculty in Continuing Education
- Resolving operational impediments in executing Continuing Education programs

The Task Force quickly agreed that the business model was the pivotal issue, and until the case could be made, and the methodology determined, for managing the financials of Continuing Education that served the interests of all stakeholders, the remaining areas were considered less urgent.

1. Developing a Business Model for Continuing Education.

The objective of this effort was to conduct a quantitative analysis of representative cash-flows in short course scenarios, creating a model and a tool that detailed all aspects of the revenue and expense ledgers associated with course delivery, and at the same time revealing the budgetary headroom for faculty incentives and recovery of net proceeds to the university. Professor Michael Walls led the development of this model, and provided side-by-side comparisons of fee-based and profit-sharing distribution philosophies, and a five-year extrapolation of the potential business growth that might be achieved by the enterprise. The effort included some calibration of the model against existing SPACE financials, which also revealed the diversity of short course program budget structures that currently exist.

Projections from the model showed that with a realistic mix and volume of deliveries in a year, and an extrapolation over five years, operating income in a fee-based structure grows from
$3MM to $5MM with corresponding unrestricted net proceeds to CSM ranging from $0.4MM to $0.7MM. In the profit-sharing structure, the comparable amounts are $4MM to $6.5MM over five years, with unrestricted net proceeds increasing from $0.6MM to $1.0MM.

As a data-point, SPACE’s operating income for FY15 was $4.14MM and it released $0.5MM in unrestricted net proceeds to the Mines general fund.

Two key observations arise from this analysis:

- SPACE currently offers roughly one short course per week and enrolls about 2,000 participants during the period of a year, and its income and net proceeds are in the ballpark of the model’s first year projections, but are arguably not optimized vis-à-vis fee-based or profit-sharing options.

- If continuing education is to become an enterprise in which the unrestricted net proceeds to Mines have a much more substantial, multi-million dollar, positive impact in the mix of the university’s revenue streams, the model shows that a status-quo approach can achieve some modest growth, but will not viably achieve a five- or ten-fold increment in net proceeds.

The takeaway is that if Mines operates at close-to-market rates on course registration fees, is market-aligned on applicable expenses, including market-competitive incentives for instructors, and has a delivery schedule of about 150 days per year with about 2,000 total participants, and if Mines seeks to multiply the net proceeds by many-fold, then fundamentally different delivery models, significant up-scaling, and programs will be needed.

In turn, this will require that Mines – as a university, and not just the outreach operation – can adapt and provide infrastructure, deployment of personnel, and operating procedures that can support this escalation.

2. Determining Curriculum and Content for the Continuing Education Portfolio

In general, SPACE has a history of operating closer to the professional market than to Mines’ academic units, and consequently has the perception of being a fringe operation and an appendage to the university. In this mode, it has been vigilant for business opportunities and quick to configure and provide short courses that are entrepreneurially-motivated, yet still carry the brand and imprimatur of Colorado School of Mines. Necessarily, this involves vetting of content and instructors within the appropriate academic unit at Mines, and in many cases the instructors are from the off-campus professional community. For the off-campus instructional situation, the financials are predominantly profit-sharing after all fixed delivery and indirect costs have been deducted. In these instances, a considerable amount of received revenues are transferred to off-campus payroll coffers. If the instruction is provided by an on-campus faculty expert, a similar model typically prevails, but the payroll benefit is accrued by Mines faculty, although the budget must handle substantial deductions for Mines’ employee fringe benefits. There are other on-campus instructional models where the faculty receive a fixed daily rate (typically in excess of their pro-rated academic salary), and excess profits may revert to the hosting academic unit.
The Committee entered into philosophical discussion on the affiliation, and the affinity, of Continuing Education courses to the academic colleges, departments and research centers (collectively – academic units) at Mines. General points included:

- The extent to which a continuing education course should be aligned and owned by an academic unit, as distinct from it being a sanctioned standalone under the SPACE umbrella. In the case of an academic unit having more direct ownership of a course, its purpose is to be a true extension of that unit’s educational and research mission into the professional community, with the multiple benefits of professional networking for advancement of research, attracting graduate students, and profit-sharing back to the particular academic unit. Such continuing education courses are deemed to be ‘academically-motivated’ in contrast to being ‘entrepreneurially-motivated’.

- The genesis of continuing education courses is best served in the academic units. This provides for natural mission-alignment with Mines and its brand, and leverages the reputation of a proposing faculty member in advertising and attracting a professional audience of adequate size. The leadership, and store-front, of bona fide Mines faculty in continuing education courses is essential for intellectual credibility and carrying the Mines brand into the professional community, even if some fraction of the instruction is delivered by subordinate professional colleagues from the off-campus community.

- The existing slate of course offerings through SPACE are reflective of its history, and although there are some exceptions, most are entrepreneurially-motivated via a market-attractive topic put forward by individual faculty or sanctioned industry experts. The exceptions are more academically-motivated programs, organized and delivered through an academic unit – and with accordant benefits to that unit.

- A strong case can be made for a review of the existing course offerings in terms of their alignment as entrepreneurially-motivated or academically-motivated, particularly in light of the formation of the academic colleges at Mines, the formation of new research centers, and the like. As such, some – and perhaps most – of the existing course offerings could migrate to ownership and direction by an academic unit that has clear mission alignment with course content. Not doing this creates a situation where a SPACE offering may be operationally divorced from a mainstream university program, with the consequence that the university is competing with itself.

- Realignment of some SPACE courses into clear academic ownership by an appropriate unit may cause short-term market and attendance perturbations, and hence revenue shortfalls, but in the longer term it serves the university’s interests much more effectively.

- There must still be room for entrepreneurially-motivated course developments. Metaphorically, entrepreneurially-motivated courses operate ‘outside-the-fences’ of our mainstream duties, while academically motivated courses operate ‘inside-the-fences’. Inside-the-fence activity is bound by all the usual university regulations, but is not deemed to be a conflict because the effort is embraced by Mines’ mission. Outside-the-fence activity is more akin to consulting, more laissez faire in spirit, but is deemed extra professional work subject to conflict of commitment and conflict of interest review.
3. Engaging Faculty in Continuing Education

The Committee has not yet addressed this topic in detail, recognizing that aspects of faculty engagement are contingent on some of the issues above, especially incentivization as embedded in the business model, and whether a faculty member engages ‘inside-the-fences’ in an academically-motivated program, or ‘outside-the-fences’ in an entrepreneurially-motivated program. In this context, the list of issues affecting faculty engagement include:

- Determining extra pay policies, taking into account the influence of markets and the free-market value of a professor’s expertise; compensation offered by other professional short course providers in the same market space; set rate of pay by the hour, by the day, or simple profit-sharing; compatibility with funded research and compliance with federal regulations; apportionment of time and effort to different duties and accounts; auditability.
- Leveraging of instructional resources, providing a broader base of off-campus instructional expertise with the capability to amplify a professor’s capacity.
- Making the engagement of faculty in continuing education at Mines as easy to do, and as profitable, as doing it through an external (competing) provider.
- Assessing the merits for a role of continuing education in career progress toward promotion and tenure.
- Understanding the pressure on faculty to fulfill existing expectations in teaching, research and service, and the possible re-apportionment of that spread to include continuing education.
- Training and professional development of faculty for intellectual and academic engagement with mid- and senior-career professionals as distinct from traditional students.
- Specifying capability in continuing education as an attribute in faculty recruiting.

4. Resolving Operational Impediments in Executing Continuing Education Programs

While the Committee believes that facilitating the operational issues amounts to ‘putting-into-practice’ the outcomes of the prior three areas, it did identify several issues at the outset of its work, and these are still to be undertaken:

- Clarifying the chain of approvals for faculty deployment in continuing education; the level at which authorization occurs; the clarity, alignment and minimization of paperwork; and the reduction of delays.
- The non-uniformity of net benefits between on-campus and off-campus instructors – mostly because of fringe-benefit deductions for Mines employees.
- Burdensome contracting issues because of non-uniformity of clients driving case-by-case contracting situations.
- Time reporting issues for PERA retirees.
- Time and effort reporting issues for compliance with the ACA.

**Section 5: Recommendations and Next Steps**

The work of this Committee is not complete, and its efforts will continue as part of the next steps. But accomplishments and discussions so far have revealed that:

- The value propositions among stakeholders and participants in continuing education are unclear and disjointed.
- If Mines is to multiply its auxiliary revenues from continuing education, it needs delivery and market multipliers too. More of the same will be modestly additive, but not multiplicative.
- The Mines brand is a critical asset, and a hallmark of the academy. As such, Mines’ continuing education products need to be tightly affiliated with academic units.

1. **Affirmation of Value Propositions**

   The university community-at-large is not broadly unified around a coherent value proposition for continuing education. From the perspective of the central administration the principal value lies in a diversified stream of unrestricted revenue. From the perspective of a faculty member there are assorted value drivers, including supplementary income, expanded professional recognition, industrial networking, fertilization of research, but offset by detraction from career advancement in conventional academic metrics and, in many cases, plain and honest disinterest. From the perspective of an academic unit, the value lies in a middle-ground mix of shared revenues and added visibility in the unit’s mission space.

   Fundamentally, if Mines is to do more in the continuing education arena, it needs an intrinsic climate of value-added ‘pull’ and attraction to engage, rather than having those who wish to do so ‘push’ to accomplish their goals. All stakeholders need to be pulling in the same direction, and nurture a bottom-up swell of enthusiasm and activity.

   Accordingly, a key recommendation is that we more fully understand, and then align, the value propositions among the entities that are pivotal in the delivery of continuing education courses: primarily the faculty, and their academic units, and at the same time make a university-wide affirmation that this endeavor is valuable and important.

2. **Multiplying and Up-scaling Continuing Education Activity**

   While the face-to-face professional short course scenario must continue, new avenues of scale should also be developed, including:
- Expansion of reach through internet delivery. This is especially pertinent in the international marketplace, and especially pertinent in distant, resource-developing, countries that want Mines’ expertise.

- Expansion of audience through delivery of academic credit. Here the opportunities are in the realms of executive degrees and professional masters programs. To the extent that some or all aspects of these might be internet-delivered could be a further enhancement.

- Expansion of venue through repetitions of short courses in additional locales. Most current offerings take place in Golden. Once packaged and developed, it’s entirely plausible that a course could be on an annual circuit around the country or around the world.

- Expansion of market segment and elevation of product price-points through custom programs for corporate executives. While some of this is currently being done (particularly in the international realm), it is a very fertile area for growth and reputation-building, especially as it relates to the prevailing challenges of executive leadership in the minerals and energy sectors.

3. Realignment of Existing Offerings

Although this has not been past practice, it should become an annual house-keeping task to review short course offerings through SPACE and determine if they are competing in any way with the mainstream agendas of our academic units. If so, their academic-unit affiliation must be affirmed and they must be recognized as academically-motivated courses with ownership and operation ‘inside-the-fences’.

Section 6: Resources/references consulted

1. PEICE (professional training for the petroleum industry) – benchmarking on program costs and disbursements of budget

2. PetroSkills (professional training for the petroleum industry) – range of offerings and venues of delivery

3. Education Activities Board – custom report in progress: STEM and Extractive Industry Focused Continuing Education Content and Structure