

**Proposal for Strategic Accelerated Review
Entrepreneurship Major and Minor
College of Business**

Overview

The Department of Management and Marketing in the College of Business (COB) at the University of Wyoming (UW) serves students, the business community, and the state by offering an Entrepreneurship major and minor. The Entrepreneurship program contributes to the strategic goals of the College, as well as the University’s newly developed mission of making UW more digital, entrepreneurial, interdisciplinary, and inclusive.

Entrepreneurship education at UW and throughout the state is grounded in the understanding that developing entrepreneurial thinking is not only reserved for the business student, engineer, or future business leader, but that entrepreneurial thinking is of value to people in all walks of life, especially as we enter what is certain to be an increasingly disruptive economic environment. The COB has implemented a new curriculum that features an entrepreneurship minor available to non-business majors, and a revamped entrepreneurship major for business students (please see Table 1 for current enrollment data). The vision for this initiative emphasizes accessibility to Wyoming’s community college students and UW undergraduate and graduate students and includes experiential learning as a key component of the student experience.

An invigorated entrepreneurial education enterprise easily accessible to and supportive of all Wyoming college students represents a launchpad for those seeking to explore opportunities related to entrepreneurship-focused academic programs, coursework, events and speakers, student organizations, internships, and business plan competitions. Keeping our best students within the state to create new and innovative organizations and customer markets, increase the availability of entrepreneurially-skilled labor, and foster an entrepreneurial mindset state-wide will all help to support innovative business models that enhance the vitality and diversity of the Wyoming economy.

Table 1. Enrollment in the Entrepreneurship Major							
	AY 18		AY 19		AY 20		AY 21*
	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2019	Spring 2020	Fall 2020
2 nd Bachelor’s	2	1	0	0	0	0	0
Seniors	21	32	48	40	36	38	36
Juniors	30	29	30	35	32	28	19
Sophomores	30	27	17	25	24	18	19
Freshman	18	10	15	13	19	8	12
Total	101	99	110	113	112	92	86
AY Totals	200		223		204		

*AY 21 data as of December 15, 2020.

Note: The entrepreneurship major was first offered fall 2019. Prior to fall 2019, entrepreneurship was a concentration within the management major.

The College of Business supports the entrepreneurship ecosystem at UW through curriculum deployment and enhanced experiential learning opportunities available to all Wyoming college students. The COB offers its entrepreneurship program as part of its AACSB accredited undergraduate business degrees. This includes the recent creation of several courses: ENTR 2700 (Entrepreneurial Mindset), ENTR 3700 (Innovation, Ideation, and Value Proposition), ENTR 4700 (Business Model Creation and Launch), and ENTR 4750 (Theories of Entrepreneurship). Further, the COB is actively involved in providing experiential learning to students both inside and outside the classroom. Inside the classroom, experiential learning is integrated into each ENTR course. Outside the classroom, the COB supports experiential learning through activities such as the Ellbogen \$50K Entrepreneurship Competition.

Contributing to the Strategic Vision of UW - President Seidel's Four Pillars

More Digital – With the new curriculum, ENTR 2700, will have one section offered 100% online beginning spring semester 2021, with plans underway to develop the remaining ENTR curriculum for online delivery. One of our outreach programs, Entrepreneur Essentials (E2), in collaboration with CEAS and CWC, will be offered 100% online beginning late January 2021. E2 has an initial target market of Wyoming citizens and community college faculty and students.

More Entrepreneurial – The COB continues to innovate in the entrepreneurial education space through experiential learning, student competitions, internship opportunities, and outreach program collaborations that will deliver programming such as E2 or deliver programming to entities such as the Wyoming Association of Career and Technical Education (WACTE).

- Experiential learning opportunities involve working with local, regional, and national clients, supporting applied class projects, inviting guest speakers, and internships. The emphasis is on providing Wyoming college students with ‘hands-on’ opportunities to experiment and develop critical thinking capabilities related to their chosen fields. Further, experiential learning creates pathways for Wyoming college students to discover and exploit relevant career opportunities, which may include the creation of a start-up enterprise, providing innovative and creative solutions within an existing organization or family firm, or pursuing entrepreneurial endeavors that tie back to the student’s discipline.
- The Ellbogen \$50k Entrepreneurship Competition, administered by the COB, is focused on the academic exercise of thinking through the launch of a start-up company and is open to any Wyoming college student. The competition is funded by the Ellbogen Foundation and First Interstate Bank. Although named the “\$50K,” May 2020 marked the first year the prize money awarded reached \$65,000, which is a testament to the support and confidence of the competition donors.
- Internships represent a unique opportunity to catalyze growth in Wyoming-based start-up companies and create recruitment opportunities that can lead to full-time positions in Wyoming for Wyoming college students. Further, each year UW student interns are placed with Impact307. These internships tend to focus on projects for start-up companies with a goal of experiential learning and assisting the start-up. Student interns build business leadership skills and are provided the opportunity to launch their own company or become a critical early employee of another start-up. Assignments tend to shift dynamically with demand, resulting in further experiential breadth.

More Interdisciplinary – The COB offers a new inter-disciplinary entrepreneurship major as well as an interdisciplinary cross-campus minor as part of its AACSB accredited undergraduate business

programs. Minor course electives span 4 colleges and schools across campus, as well as electives from Wyoming community colleges.

More Inclusive – Inclusiveness can be seen through the accessibility of the entrepreneurship major and minor courses and programming (please see Table 2 for student demand statistics). ENTR 2700 is a regular online offering, opening access to students across the state. Further, the Ellbogen \$50K Entrepreneurship Competition, which is open to all Wyoming college students, allows access to ENTR 4700 to finalist teams from across the UW campus and Wyoming community colleges. The new Entrepreneur Essentials (E2) course is a 7-weeks course offered online to Wyoming citizens, as well as community college faculty and students. Entrepreneurship programming is in development for delivery June 2021 to Wyoming high school teachers (and subsequently high students) through the WACTE summer conference.

		Laramie 360		National	
Category	Criterion	Value	Pctl	Value	Pctl
Size	Inquiry Volume (12 months)	96	99	1,554	97
	Google Search Volume (3 months)	4,191	57	127,819	56
	Completions	98	93	2,756	93
Growth	Inquiry volume YoY Change	45	99	653	99
	Google Search YoY Change	61	45	6,779	67
	Completion Volume YoY Change	29	98	59	92
Student Demand Score		17	98	13	97

Land Grant Mission

Aligning with UW’s land grant mission, entrepreneurship education offers several direct and identifiable benefits to the Wyoming economy. First, offering enhanced curriculum and experiential learning opportunities for students within the state’s community college system and UW will significantly increase the probability that students remain in Wyoming after graduation (please see Table 2 for student demand statistics). Fostering an entrepreneurial mindset within our students, many of whom would like to stay in Wyoming but do not currently believe it is possible to do so, will help them to realize that they can create profitable business opportunities and live out their dreams in the state. Second, as a corollary to the first point, it is hoped that entrepreneurship education will result in the creation of more businesses and increased jobs within the state. Third, existing businesses in Wyoming will benefit from enhanced access to Wyoming college students for internships and applied class projects, increased availability of skilled labor, and the opportunity to leverage entrepreneurial-minded students that can deliver innovative approaches in strategic business planning. Fourth, entrepreneurship education will enhance the efficacy and relevance of existing programs such as the Kickstart Wyoming program sponsored by the Wyoming Business Council as well as Wyoming Workforce Service’s Workforce Development Training Fund’s Chapter 5 Internship Grants. Taken together, these various benefits help to illustrate the positive influence that entrepreneurship education will offer to economic diversification within the state. Please see Table 3 for entrepreneurship employment statistics.

Category	Criterion	Wyoming		Laramie 360		National	
		Value	Pctl	Value	Pctl	Value	Pctl
Size	Job Postings Total (12 Months)	3	56	179	67	5,191	70
	BLS Current Employment	55	70	1,097	71	30,030	69
	BLS Annual Job Openings	5	69	113	70	3,033	69
Growth	BLS 1-Year Historical Growth	8%	38	4%	47	4%	58
	BLS 10-Year Future Growth	-0.1%	60	1.1%	64	0.8%	67
Saturation	Job Postings per Graduate	0.2	17	0.9	31	0.7	36
	Job Openings per Graduate	0.3	24	0.8	41	0.5	41
Wages	BLS 10th Percentile Wages	\$42,987	61	\$40,255	66	\$44,171	72
	BLS Mean Wages	\$102,030	92	\$91,566	91	\$94,356	91
National ACS Survey	Nat'l ACS Wages (Age <30)	\$46,981	73	\$46,981	73	\$46,981	73
	Nat'l ACS Wages (Age 30-60)	\$98,372	76	\$98,372	76	\$98,372	76
	Nat'l ACS % Unempl. (Age <30)	5%	89	5%	89	5%	89
	Overall Score	0	77	0	76	1	82

Collaborations with Programs at UW

Business Resource Network (BRN) – A vibrant entrepreneurship education provides students with the springboard to enter the entrepreneurship ecosystem at UW through the BRN. The COB provides input (e.g., educated students) to the ecosystem. Internship and experiential learning opportunities for students within Impact307 are promoted by the COB.

College of Agriculture and Natural Resources (CANR) – CANR courses have been proposed and approved as electives for the Entrepreneurship minor. In addition, CANR students are regular applicants to the Ellbogen \$50K Entrepreneurship Competition.

College of Arts and Sciences (CAS) – The CAS contains the highest diversity of disciplines at UW and has diverse needs from and interactions with an entrepreneurship education. CAS courses have been proposed and approved as electives in the Entrepreneurship minor. In addition, CAS students are regular applicants to the Ellbogen \$50K Entrepreneurship competition.

College of Education (COE) – The COB and COE are collaborating on an entrepreneur education program targeted to members of WACTE. This program begins June 2021 with the intent of promoting entrepreneurship curricula in Wyoming high schools.

College of Engineering and Applied Science (CEAS) – The CEAS shares an Entrepreneur in Residence to help deliver COB coursework and the CEAS offers courses for the Entrepreneurship minor. The structure of the minor lends itself well to the technical elective structure and accreditation requirements of engineering majors. The existing Entrepreneurship for Engineers course has been coordinated with COB courses to offer enhanced value and more effective use of resources for both colleges. In addition, CEAS students are regular applicants to the Ellbogen \$50K Entrepreneurship Competition.

Haub School of Environment and Natural Resources (Haub) – Haub School courses have been proposed and approved as electives in the Entrepreneurship Minor. In addition, Haub School students are regular applicants to the Ellbogen \$50K Entrepreneurship Competition.

School of Energy Resources (SER) – Initiatives in SER are intended to spur development of new business enterprises in Wyoming and can benefit from the expertise provided by an entrepreneurship education. In addition, SER students are regular applicants to the Ellbogen \$50K Entrepreneurship Competition.

Resource Needs: Faculty Positions

New faculty lines are mission critical in that they will help the COB pursue entrepreneurship initiatives and fulfill UW's land grant, flagship, and research missions. This would include a specific need for faculty who are able to teach courses offered in our major and minor, as well as faculty who can help provide experiential learning opportunities for students. This helps the COB pursue its education-focused mission. Further, faculty should be recruited to help perform meaningful and impactful research related to entrepreneurship-focused topics. This helps the COB pursue its research-focused mission.

With current faculty levels (please see Table 4), the COB offers 10 sections/AY of ENTR 2700, ENTR 3700, and ENTR4700, which requires relying on an Entrepreneur in Residence from CEAS. Current student demand requires the offering of 12 sections per academic year, which we are unable to satisfy. Projections suggest that there will be student demand to offer 14-15 sections per academic year of the above-mentioned curriculum beginning fall 2021. New faculty lines in this space (e.g., entrepreneurship, strategic management, strategic marketing, innovation, new product development) will help support the growth of entrepreneurship course offerings and experiential learning opportunities such as the Ellbogen \$50K competition. Further, the COB is very efficient with current faculty levels (please see Table 5) but will need to increase faculty numbers to adequately cover current program requirements and growth.

Table 4. Number of FTE Entrepreneurship Faculty

	Spring 2020	Fall 2020	Spring 2021*
Tenured/Tenure-track	2	2	2
Lecturer	2	2	2

*Spring 2021 numbers are based on data as of December 15, 2020.

Note: This limited snapshot of three semesters produces the most accurate data of FTE faculty for the entrepreneurship major due to implementation timing.

Table 5. Student Credit Hours Taught by Full-Time Equivalent (FTE) Faculty by Category

	Spring 2020		Fall 2020		Spring 2021*	
Tenured/Tenure-track	132	57%	213	69%	180	64%
Lecturer	99	43%	96	31%	102	36%
Total	231		309		282	
SCH Taught by FTE Faculty	57.75		77.25		70.50	

*Spring 2021 numbers are based on data as of December 15, 2020.

Note: This limited snapshot of three semesters produces the most accurate data of SCH production by faculty for the entrepreneurship major due to implementation timing.

Conclusion

The COB Entrepreneurship major and minor provide tremendous service and value to the state of Wyoming and University of Wyoming with minimal resources. To ensure that this major and minor continue to meet the future needs of the state's citizens and contribute to Wyoming's economic growth and diversification, additional investment in resources, particularly around adding qualified faculty, is critical.