7 March 2014

TO: Jocelyn Milner, Associate Provost and Director, Academic Planning and Institutional Research

FROM: Kathryn VandenBosch, Dean, College of Agricultural and Life Sciences

RE: Undergraduate Business Management Certificate

At its regularly scheduled meeting on March 4, 2014, The College’s Academic Planning Council approved the Department of Agriculture and Applied Economics and the Department of Life Sciences Communication’s join request to create a new Undergraduate Business Management Certificate. We understand this motion requires action by the University Academic Planning Council and ask that it be placed on their agenda at the earliest possible time. Supporting documents are attached. Please feel free to contact me if you have any questions.

cc: CALS APC
Ian Coxhead
Dominique Brossard
1. **Certificate in Business Management for Agricultural and Life Sciences (Certificate)**

   a. The Departments of Agricultural & Applied Economics (AAE) and Life Sciences Communication (LSC) of the College of Agricultural and Life Sciences (CALS) will be the sponsoring units of this certificate. The Renk Agribusiness Institute (RAI) and AAE will serve as the administrative home for the Certificate and will be responsible for student services, compliance, governance, coordinating resources that support the Certificate and collaborating with the Wisconsin School of Business (SoB).

   b. Bruce L. Jones, Director, Renk Agribusiness Institute, will serve as faculty director of the Certificate program.

   c. **Program Committee:** faculty, departmental affiliation, and terminal degree
      i. Bruce Jones – AAE/RAI, Director – PhD
      ii. Jacqueline Hitchon – LSC – PhD
      iii. Don Hausch – SoB – PhD
      iv. Renk Council Faculty -AAE- PhD
      v. AAE Undergraduate Student Services staff - BS
      vi. LSC Undergraduate Student Services staff – MS
      vii. RAI Associate Director – AAE/RAI – MBA

2. **Projected Implementation Timeline.**

   The certificate will be awarded at graduation upon successful completion of 12 required and 6 elective credits for a minimum of 18 credit hours of coursework specified in the curriculum sheet for the Certificate, certified by DARS. (See Section 6 ‘Curriculum’). All required courses are listed in the UW course catalog and accessible to CALS students. Coursework to satisfy the Certificate requirements is in addition to the undergraduate degree program requirements and compatible with a four-year graduation schedule. Students could begin enrolling as early as the Fall 2014 semester. Pursuit of the Certificate should not delay graduation.

   The conferral of the Certificate in Business Management for Agricultural and Life Sciences shall be permanently recorded on the recipient’s official transcript of grades providing a tangible, measurable recognition of the student’s successful completion of this focused area of study complementing their chosen major.

3. **Supporting Letters from Other Academic Units. (See Appendix VI - Letters of Support).**

   Attached please find Letters of Support from seven CALS departments and the Wisconsin School of Business stating enthusiasm for the Certificate. Each department shares a student audience, represents an area of excellence in departmental teaching and wishes to provide
formal recognition of student achievement in the business track as an enhancement to specific, departmental degree/major coursework. Each department has obtained approval from its curriculum committee for the Certificate and supports the codified recognition of coursework in business related to agricultural and life science industries as beneficial to their students and specific programs.

Lastly, each has also registered student and employer interest in completing a concentrated curriculum of generally accepted business basics to be applied uniquely to their individual disciplines (e.g. Dairy Science excellence is complemented by business management basics). While the Certificate is not restricted to production agriculture majors, the core demand rests with those departments, as evidenced by their letters of support. Indeed, the Certificate aligns particularly well with social science and agricultural production majors as it meets the objectives of the prior ‘Business Option,’ which was eliminated during the college-wide curricular revision in 2010.

4. Governance

The Program Committee (See 1.c.) will serve as the governing body for the Certificate.

5. Purpose, Rationale and Justification

Basic business literacy can benefit all University of Wisconsin-Madison bachelor’s degree graduates, no matter their field or intended career. When entering the professional world, CALS students are increasingly confronted with situations and contexts that require an understanding of basic business and management concepts. The Certificate intends to provide the framework for CALS students to gain this knowledge and receive the tangible outcome of a record on their official transcript.

According to members of the CALS Board of Visitors, recent graduates are well trained in sciences but lacking in knowledge of business and management concepts. The Certificate program is intended to give CALS students an opportunity to develop an understanding and appreciation of standard management practices used in agri-business and life science industries. Currently, students majoring in agricultural and life sciences can either take a couple of business courses selected idiosyncratically; double major in economics, agricultural economics, or life sciences communication; or pursue a broad certificate from the SoB. Adding this Certificate allows CALS students who don’t have time or space in their schedule for a double major to work towards a more tightly focused agri-science-based management certificate.

Many students, alumni and employers have testified to the value of the former CALS Business Option or Life Sciences-specific business skills, upon entering the work world. The proposed Certificate is intended to help solve the scheduling challenges of students wanting to acquire management expertise while fulfilling their undergraduate majors. It will also provide agricultural and applied business skills appropriate specifically for their majors. The certificate thus seeks to provide students with the knowledge in business management necessary to be maximally successful in agricultural and life sciences industries. Indeed, CALS

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students will benefit from exposure to the particular synergy between science specific issues and practices in business.

The Certificate strives to educate students to combine deep scientific understanding of a product or service with the skills to communicate its unique capabilities to a lay audience. For example, being able to introduce a new product that combats coccidiosis in poultry is not possible without a deep understanding of how coccidiosis not only affects poultry producers but the entire supply chain from producers to consumers. This specialized business certificate integrated with science knowledge, will prepare students to comprehend and appreciate the interrelationships among agencies comprising food systems.

In line with the more detailed Elements of Agribusiness Literacy and Measurable Learning Outcomes (See Appendix V), the proposed certificate will:

- create a mechanism and support structure to allow students to increase their knowledge and understanding of management fundamentals in an agricultural and life sciences context;
- foster the understanding of finance, economics, marketing and communication as they relate to management in agricultural and life sciences industries; and
- enable students to tailor their management expertise to their chosen careers by complementing their majors.

Through this certificate program, CALS students will develop cross-disciplinary expertise and therefore be better equipped to comprehend and contribute to agricultural and life sciences industries.

6. **Curriculum**

The courses constituting this certificate are already taught by faculty and staff across campus, especially CALS with space and capacity for Certificate students. The proposed Certificate allows students a wide array of choices for their Certificate electives. This proposal provides a list of courses for students to consider in building their curriculum to complement their degree program. Each course on the list is taught on a regular basis providing ample selection for the students to choose from. The certificate provides the combination of a required core (GEN BUS 310 & 311, AAE 215 and LSC 270) plus the ability for students to choose two courses closely aligned with their major subject area.

**Credits Required**

Students in the Certificate program will be required to take 18 credits, 12 of which will be required core areas, and the remainder of which will be electives chosen by students from the list on the next page, in consultation with their advisor. Twelve of the credits used to fulfill the Certificate requirements will be taken in CALS. The four required courses are taught each year, some are taught both semesters. Two elective courses may be taken anytime. All departments offering Certificate electives have committed to making space available for Certificate students and have agreed to ongoing communications with the Certificate faculty program director about these courses in the Certificate program.

**Performance Standard**

To obtain the Certificate, students must achieve a 2.0 GPA within the Certificate courses.
Program Revisions and Modifications

Course substitutions for Certificate program requirements will be approved by the Program Committee on a case-by-case basis per the recommendation of a student’s academic advisor for their major.

Periodically, courses may be added or removed from the Certificate program based on the recommendation of the oversight committee, the results of course evaluations and the approval of the CALS Curriculum Committee.

Student Records

DARS will certify students who have fulfilled the requirements. Students and advisors may monitor progress towards completing Certificate requirements by accessing DARS. The AAE Undergraduate Student Services Coordinator will be responsible for submitting Certificate Declarations and for forwarding the names of students who successfully complete the Certificate to the CALS Dean’s Office who will in turn submit this information to the Registrar in order that the Certificate appears on students’ official transcripts.

Academic Advising

Given the simplicity of the requirements, advising in matters related to course planning should be minimal. Much of the advising related to career options will come from the students’ majors. The Departments of Life Sciences Communication and Agricultural and Applied Economics will provide additional advising as needed.

Course Enrollment

There will be an initial cap of 50 new students enrolling each academic year. Should the program consistently exceed enrollment limits and course capacity, the RAI oversight committee will establish competitive admission procedures to maintain quality student services and support student progress toward certification in a timely manner.

Appropriate preference, in the form of priority access to the courses that comprise the core requirements of the Certificate program, may be given to students who have formally declared their intentions to earn a Certificate.

Certificate Structure and Objectives

The Certificate seeks to provide students with an understanding of business concepts applied specifically to agri-sciences. The three parts of the curriculum are:

1. Gen Bus 310 and 311 which provide non-business majors an overview of key areas in business:
2. AAE 215 and LSC 270 which focus on the intersection of business and agri-sciences; and
3. Two elective courses that provide students an understanding of business as it is practiced in their intended agri-science field.

The audience for the Certificate is students in agri-science majors who intend to enter an agri-science field, but who want to understand the business context in which their science will be done, and want to be able to communicate effectively with their colleagues in accounting, sales, and so forth. Detailed learning goals are specified in Appendix V. The table below summarizes the overall structure of the Certificate and how that structure serves overarching learning objectives.
<table>
<thead>
<tr>
<th>Learning Objective</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>An introduction to general business concepts. General Business 310 provides expertise on accounting and finance while 311 provides expertise on management and marketing.</td>
<td>Gen Bus 310 &amp; 311</td>
<td>6</td>
</tr>
<tr>
<td>An introduction to the intersection of business with agri-science. AAE 215 is an introduction to economics as related to the agricultural and life sciences while LSC 270 is an introduction to communication in the agricultural and life sciences.</td>
<td>AAE 215 and LSC 270</td>
<td>6</td>
</tr>
<tr>
<td>Upper-level work focused on agri-science contexts specifically relevant to the student. For example, AAE 320 focuses on farming systems management, AAE 540 focuses on intellectual property rights, Dairy Science 433 focuses on dairy herd management, LSC 431 focuses on advertising in the life sciences, and LSC 435 focuses on marketing in the life sciences. These electives give students ample options to gain expertise which will be useful for them.</td>
<td>2 elective courses chosen from the following: AAE 320, 322, 323, 419, 421, 526, 540, DYSCI 433, 535, LSC 250, 251, 431, 435, 515</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

7. **Overlap Limits**

There is sufficient overlap with the Agricultural Business Management major to preclude those students from participating in the Certificate program. Other majors within CALS may combine the Certificate requirements with their major requirements, (as documented in Appendix III, SAMPLE Four-Year Plan) to graduate with both a CALS degree/major and a Certificate. Students with a major in AAE or LSC may count no more than two courses toward both their major requirements and the Certificate requirements to ensure they are fulfilling both sets of requirements while expanding their agri-science specific business knowledge.

8. **Assessment and Program Review**

The primary goal of the Certificate is to fortify the specialty area of their majors with agri-science specific business skills. The core courses create the basic business foundation of accounting, finance, management, marketing, applied economics and science communication followed by electives in their agri-science management area. This coursework will enhance student work readiness, building awareness and understanding of the basic principles utilized in most entry-level positions in these areas. The core coursework paired with the elective selections in each student's area of interest or expertise will provide graduates with an advantage in the work-world by providing them common language, exposure and basic skills to add to their degree major expertise.
Students’ progress toward these goals will be assessed during advising as they move through the program. The program will also monitor grades awarded to Certificate students in comparison with their class cohort to examine Certificate participant performance with peers. There will be a bi-annual conference date for all Certificate students to meet, discuss internships and perform DARS update and evaluation.

Student services staff will conduct exit interviews with all Certificate participants. Every two years the staff will conduct focus groups comprised of the Program Committee, randomly selected Certificate students who are within two semesters of graduating, employers and alumni. A comprehensive program evaluation will occur every five years where participation, student surveys and alumni surveys will be examined in totality.

9. Admission

The AAE Undergraduate Student Services Coordinator will be responsible for accepting student Certificate Declarations and routing them to CALS Dean’s office as students progress through the program. This will ensure Certificate progress is made in conjunction with degree completion. If more than 50 students request to enroll in the certificate in any year the Program Committee will meet and develop competitive admission requirements that emphasize providing access to students best aligned with the Certificate goals. Students will then be required to self-nominate for the program and the council will review all applications prior to fall semester registration.

10. Enrollment, Progress, and Certificate Completion

Once students are enrolled in the Certificate program the Program Committee will monitor Certificate participant’s DARS reports and projected class scheduling.

11. Advising and Exceptions/Substitutions

For advising, see section 6, subsection “Advising.” For exceptions/substitutions, see section 6, subsection “Program Revisions and Modifications.”

12. Enrollment of University Special Students in Undergraduate Certificates

No Special Students will be admitted at this time.

13. Resources and Ongoing Commitment

The Certificate in Business Management for Agricultural and Life Sciences is an ideal execution of the RAI goal to provide agribusiness education and outreach. These duties are built into the RAI Director and Associate Director position descriptions and implementing the Certificate program will fulfill RAI institutional goals within current, established RAI work schedules. The RAI has resources available in the form of time, advising, and administration, and requires no new job duties to be added to current staffing commitments.
**Required Attachments**

- Appendix I - Catalog Description for Core Certificate Courses
- Appendix II – Catalog Description for Certificate Electives
- Appendix III - SAMPLE Four-Year Plan
- Appendix IV - Sample Certificate Exit Interview ***
- Appendix V - Elements of Agribusiness Literacy and Measurable Learning Outcomes
- Appendix VI - Letters of Support for Certificate in Business Management for Agricultural and Life Sciences
  - Department of Agricultural & Applied Economics - Co-sponsor
  - Life Sciences Communication - Co-sponsor
  - Agronomy ***
  - Animal Sciences ***
  - Dairy Science ***
  - Horticulture ***
  - Soil Science ***
  - Wisconsin School of Business
- Implementation Form - Undergraduate Certificates ***

*** These components are not required in a UAPC packet and have been extracted. If you'd like a copy of this material, contact Jocelyn Milner, jlmilner@wisc.edu
**Catalog Description for Core Certificate Courses**

**GEN BUS 310: Fundamentals of Accounting and Finance for Non-Business Majors**

Course Description: Part of a two course sequence introducing non-business students to basic concepts, practices and analytical methods that are part of the market enterprise system. This course is a basic overview on: accounting, finance, and business law.

Credit Range: 3  
Typically Offered: Fall  
Prerequisites: Jr or higher st  
Open to 1st Year Students: No

**GEN BUS 311: Fundamentals of Management and Marketing for Non-Business Majors**

Course Description: Introduces non-business students to basic concepts and practices in business. This course is a basic overview of: management, marketing, strategy, entrepreneurship, ethics, supply chain and international business.

Credit Range: 3  
Typically Offered: Spring  
Prerequisites: Jr or higher st  
Open to 1st Year Students: No

**AGRICULTURAL AND APPLIED ECON 215: Introduction to Agricultural and Applied Economics**

Course Description: Introduction to economic ways of thinking about a wide range of problems and issues. Topics include consumption, production, prices, markets, finance, trade, pollution, growth, farms, taxes, and development.

Credit Range: 3  
Typically Offered: Fall, Spring  
Prerequisites: Open to Fr  
Open to 1st Year Students: Yes

**LIFE SCIENCES COMMUNICATION 270: Communication in Life Science Industries**

Course Description: Focuses on the study and practice of the techniques of achieving clarity, brevity and effectiveness in business communications in life science industries. Covers communication planning, preparation and execution for internal and external life sciences industry audiences.

Credit Range: 3  
Typically Offered: Fall  
Prerequisites: LSC 100 or LSC 112 or LSC 212 or instructor’s consent  
Open to 1st Year Students: Yes
Catalog Description for Certificate Electives

AGRICULTURAL AND APPLIED ECON 320: Farming Systems Management

Course Description: Methods of economic analysis, planning and management applied to conventional and alternative farming systems.

AGRICULTURAL AND APPLIED ECON 322: Commodity Markets

Course Description: Principles and practices in marketing systems for U.S. agricultural commodities. Vertical organization; forward contracts, future markets, agricultural options and price formation. Alternate management at the farm, processor, wholesale and retail levels.

AGRICULTURAL AND APPLIED ECON 323: Cooperatives

Course Description: Cooperatives: Analysis of basic principles, structure and organization, legal bases, finance, history and role in U.S. economy. Different types and uses as tools in the U.S. and developing countries.

AGRICULTURAL AND APPLIED ECON 419: Agricultural Finance

Course Description: An examination of financial markets, the theory of capital, financial analysis, and financial management.

AGRICULTURAL AND APPLIED ECON 421: Economic Decision Analysis

Course Description: Managerial oriented, applied presentation of microeconomic theory. Quantitative emphasis with extensive homework use of spreadsheets and written executive summaries of applied economic analyses. Applications on natural resources and agricultural markets.

AGRICULTURAL AND APPLIED ECON 526: Quantitative Methods in Agricultural and Applied Economics

Course Description: Use of quantitative methods (mathematics, statistics, and optimization) to analyze problems faced by decision makers in natural resources and agriculture. Extensive homework requiring use of quantitative methods via spreadsheet tools to solve problems from an applied decision context.

AGRICULTURAL AND APPLIED ECON 540: Intellectual Property Rights, Innovation and Technology

Course Description: Uses economic concepts to illustrate the nature of technological innovation, competition, and economic growth. Topics: economics of the intellectual property protection (IPP); market structure and innovation; interaction between public and private sectors; IPP and anticompetitive policies; globalization.

DAIRY SCIENCE 433: Dairy Herd Management
Course Description: Application of the fundamental principles of economics, nutrition, physiology, and breeding to the management of the dairy herd.

DAIRY SCIENCE 535: Dairy Farm Management Practicum

Course Description: Principles of nutrition, breeding, reproduction, and management at the farm level are integrated. Students will develop skills in decision making, information gathering, problem solving, and interpersonal communication through field trips to working commercial dairy operations.

LIFE SCIENCES COMMUNICATION 250: Research Methods in the Communication Industry

Course Description: Introduction to research methods in the communication industry. Overview of all stages of the research process (surveys, focus groups, etc.) and of translating data into reports for expert and lay audiences and into effective campaign strategies.

LIFE SCIENCES COMMUNICATION 251: Science Media and Society

Course Description: Introduction to communication at the intersection of science, politics and society. Overview of the theoretical foundations of science communication and their relevance for societal debates about science and emerging technologies.

LIFE SCIENCES COMMUNICATION 431: Advertising in the Life Sciences

Course Description: Using marketing communication principles to make advertising decisions for agricultural inputs and food products; creating print, radio, television and multi-media advertisements.

LIFE SCIENCES COMMUNICATION 435: Theory and Practice of Integrated Marketing Communication

Course Description: This course provides practical insight into integrated marketing communication through analysis of contemporary developments in the marketplace together with theoretical background through readings from published scholarly research. It emphasizes information-seeking, oral presentation skills, and is writing-intensive.

LIFE SCIENCES COMMUNICATION 515: Public Information Campaigns and Programs

Course Description: Design, production and evaluation of communication programs aimed at informing and educating publics about agricultural, environment, science, health and human ecology issues.
### Appendix III - Certificate in Business Management For Agricultural & Life Sciences SAMPLE Four-Year Plan

#### Animal Sciences Major

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall Semester Sample Courses</th>
<th>Credits</th>
<th>Spring Semester Sample Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AN SCI 101&lt;br&gt;CHEM 103&lt;br&gt;MATH 114 or 112*&lt;br&gt;LSC 270&lt;br&gt;FIRST-YEAR SEMINAR</td>
<td>4&lt;br&gt;4&lt;br&gt;5-3&lt;br&gt;3&lt;br&gt;1&lt;br&gt;<strong>15-17</strong></td>
<td>CHEM 104&lt;br&gt;SOCIAL SCI&lt;br&gt;AN SCI ELECTV&lt;br&gt;AAE 215&lt;br&gt;HUMANITIES</td>
<td>5&lt;br&gt;3-4&lt;br&gt;1-3&lt;br&gt;3&lt;br&gt;3&lt;br&gt;<strong>15-17</strong></td>
</tr>
<tr>
<td>2</td>
<td>ZOO 151&lt;br&gt;<strong>Emphasis Course</strong>*&lt;br&gt;Ethnic/International Studies&lt;br&gt;Emphasis or Depth Course</td>
<td>5&lt;br&gt;3&lt;br&gt;3&lt;br&gt;3-4&lt;br&gt;<strong>14-15</strong></td>
<td>Emphasis Course&lt;br&gt;Emphasis or Depth Course&lt;br&gt;AN SCI 305&lt;br&gt;ZOO 152</td>
<td>3&lt;br&gt;3&lt;br&gt;4&lt;br&gt;5&lt;br&gt;<strong>15</strong></td>
</tr>
<tr>
<td>3</td>
<td>GEN BUS 310&lt;br&gt;STAT 371&lt;br&gt;AN SCI 404 OR 434&lt;br&gt;GENETICS 160 OR 466&lt;br&gt;Emphasis Course</td>
<td>3&lt;br&gt;3&lt;br&gt;3&lt;br&gt;3&lt;br&gt;3&lt;br&gt;<strong>15</strong></td>
<td>GEN BUS 311&lt;br&gt;AN SCI 311&lt;br&gt;AN SCI DEPTH&lt;br&gt;AN SCI 320&lt;br&gt;AN SCI 360 &amp; 362 OR 363&lt;br&gt;EMPHASIS COURSE</td>
<td>3&lt;br&gt;3&lt;br&gt;3&lt;br&gt;4&lt;br&gt;3&lt;br&gt;<strong>16</strong></td>
</tr>
<tr>
<td>4</td>
<td>AN SCI 435&lt;br&gt;AN SCI DEPTH&lt;br&gt;<strong>EMPHASIS COURSE</strong>&lt;br&gt;HUMANITIES&lt;br&gt;COMM-B</td>
<td>2&lt;br&gt;3&lt;br&gt;4&lt;br&gt;3&lt;br&gt;2-3&lt;br&gt;<strong>14-15</strong></td>
<td>AN SCI DEPTH&lt;br&gt;AN SCI 289, 699, 681, 682, 299, 399&lt;br&gt;<strong>ELECTIVES</strong></td>
<td>6&lt;br&gt;1-3&lt;br&gt;6&lt;br&gt;<strong>13-15</strong></td>
</tr>
</tbody>
</table>

*Emphasis courses can be business option directed, all courses in **Red** are the certificate core or electives fulfilling certificate requirements.*
Elements of Agribusiness Literacy and Measurable Learning Outcomes

CALS is committed to providing students opportunities to develop basic business literacy as a part of their undergraduate experience in preparation for a career. The list below describes elements of agribusiness literacy that provide curricular and extracurricular activities intended to help students achieve the specific outcomes specified for each element.¹

1. Overview of the marketplace

   Learning outcomes:
   - Ability to describe the role(s) of business in modern society in general and the ties between business and the agricultural and life sciences in particular (put differently, the connection of science to the marketplace, or the commercialization of bench science).
   - Ability to describe the role of agricultural and life sciences in public vs. private institutions (and/or profit and not-for-profit organizations).
   - Ability to identify the components of the marketplace (i.e., producer, distributor, marketer, etc) and to describe how they interact to form the market as a whole, and facilitate distribution in agricultural and life science sectors.
   - Ability to connect these “big picture” ideas to the particular post-graduation environment CALS students plan to enter.
   - Ability to appreciate the implications of globalization for the practice of science and business in the 21st century.

2. Vision, goals, assessment

   Learning Outcomes:
   - Ability to understand the role and creation of mission, vision, goals, and assessment in an agribusiness environment.
   - Ability to engage in long-range strategic planning, including establishing time-lines and identifying metrics for success.

3. Strategic planning

   Learning outcomes:
   - Ability to identify and assess agribusiness opportunities.
   - Ability to develop and critique a business plan for agricultural and life science sectors.
   - Ability to conduct and assess market research.

¹ For a discussion of the trend toward business literacy for scientists, see 
4. Economic, financial and accounting literacy
   Learning outcomes:
   • Comprehension and application of economic principles in the management of
     agricultural and life science industries.
   • Ability to comprehend basic financial statements.
   • Capacity to evaluate how economic events and management actions impact the
     financial operations of a business in the agricultural and life science sectors.
   • Appreciation of the roles of acquisition, debt, valuation, and portfolio management
     in maintaining the financial health of the science sector.
   • Understanding of commodity risk management and its importance in pricing, and
     procurement in agri-business.

5. Leadership & teamwork
   Learning outcomes:
   • Development of the leadership, people management, and resource allocation skills
     necessary to implement a successful agribusiness plan.
   • Ability to act as a productive and collaborative member of a team.

6. Communication in an agribusiness environment
   Learning outcomes:
   • Identify the target market and tailor communications to that intended audience.
   • Ability to write and speak clearly and accurately, particularly about scientific
     material for a lay audience.
   • Differentiate between and master the essentials of both news and marketing
     communication for the agricultural and life science sectors.
   • Capacity to navigate across state-of-the-art communication technologies.

7. Ethics & professionalism
   Learning outcomes:
   • Ability to identify ethical components of a professional situation.
   • Capacity to marshal personal and professional resources to resolve ethical dilemmas.

8. Integration of scientific and business literacy
   Learning outcomes:
   • Sophisticated appreciation of the integration of scientific and business literacy for
     optimal performance in the agricultural and life science sectors.
   • Knowledge of business practices in a specific science-based industry among
     agricultural and life science majors.
August 28, 2013

CALS Curriculum Committee:

The Renk Agribusiness Institute (RAI) is, in part, intended to improve and expand agribusiness education on the UW-Madison campus. The CALS Business Management Certificate is precisely the type of academic program that will help the institute fulfill its mission. As such the RAI enthusiastically supports the creation of the proposed certificate program and stands ready to devote considerable resources to the funding of scholarships for students who elect to earn this certificate.

Employers of CALS graduates are no longer satisfied with hiring students who have a narrow understanding of agronomy, horticulture, dairy science, food sciences, or other life sciences. Instead these employers also expect their employees to have an awareness and appreciation of business goals and basic management practices. The proposed certificate program in business management should address this issue by letting CALS students develop the understanding of business principles that their employers expect them to possess and utilize as productive employees.

The creation of this certificate program should have a very positive impact on the the CALS undergraduate program and make graduates much more prepared for careers in agribusiness and industry in general. Hopefully the committee will support this proposed program.

Sincerely,

Bruce L. Jones
Director
Dear colleagues,

Undergraduate enrollment in the College of Agricultural of Life Sciences is up 33 percent in the past decade as more students recognize growing opportunities in biotechnology, genetic engineering, renewable energy, sustainable food systems as well as traditional agricultural programs like dairy science, animal science, agronomy, and horticulture. Upon graduation, a large proportion of these students seek employment in agribusiness enterprises such as food processing, commodity trading, consulting and agricultural production and sales.

Agribusiness leaders value the technical skills and knowledge that new CALS graduates bring with them. But these employers also want their new employees to understand what business is all about and to appreciate the importance of budgets, cost controls, managerial procedures and communication. Salary data for CALS graduates show clearly that in virtually every line of agribusiness employment, employees whose job descriptions include a managerial or business dimension can command higher returns. So our challenge as an educational institution is to give students an opportunity to develop the business literacy valued by employers. We can help prepare our students for this, in part, by initiating the Certificate in Business Management for Agricultural and Life Sciences.

The faculty of the Department of Agricultural and Applied Economics heartily support the proposed certificate program. The program gives students recognition for developing the business literacy desired by employers at low cost to us because it primarily makes use of existing instructional and advising resources. At the same time this program should yield significant returns for CALS students who are unable to commit to a double major in economics/business while pursuing studies in another discipline.

A certificate program in agribusiness will help CALS and UW contribute to the continued success of agribusinesses in Wisconsin and wherever else our graduates may go. The Department of Agricultural and Applied Economics is excited to be a part of this venture.

Sincerely,

Ian Coxhead
Professor and Chair
February 13, 2012

Curriculum Committee
College of Agricultural and Life Sciences
University of Wisconsin-Madison

Dear Curriculum Committee:

I am writing in support of the proposed Agribusiness Management Certificate. The certificate responds to the desire by students for agribusiness training and for a way to document to employers that they have received this training. It also responds to employers' desire for graduates who have business competency in addition to their other major field training. The certificate fills a niche between the large course requirement of a major or double major and, at the other end of the spectrum, the very light exposure in one or two general introductory courses. The certificate takes advantage of valuable course offerings that are already available.

The proposed certificate helps fulfill the CALS objective to offer students the opportunity to add meaningful agribusiness training to the education they receive in their major.

Sincerely,

Kenneth H. Shapiro

Professor and Chair
August 29, 2013

Curriculum Committee
College of Agricultural & Life Sciences (CALS)
University of Wisconsin-Madison

Dear members of the CALS Curriculum Committee,

I am writing to express the support of the Department of Life Sciences Communication for the revised version of the CALS Business Management Certificate. The draft approved by our faculty last year was recently revised at the request of the Grainger School of Business. As a result, two courses for business non-majors that are offered by Grainger and had originally been optional in the certificate are now part of the required core. This strengthens the core.

This certificate has been developed in response to a request by the CALS Board of Visitors, and has garnered strong support from CALS departments and centers. The Board recommended that the College offer management education to its majors to complement their professional knowledge within their scientific fields. Such management education, tailored specifically to the agricultural and life science arenas, is intended to enhance the market value of CALS graduates.

The Department of Life Sciences Communication endorses the proposed certificate without reservation. We guarantee seats in our classes for certificate students and welcome this curriculum innovation.

Sincerely,

Dominique Brossard
Professor and Chair

Cc: Bruce Jones
    Jacqueline Hitchon
    Ian Coxhead
Date: March 5, 2014

To: Curriculum Committee
   College of Agricultural and Life Sciences
   University of Wisconsin - Madison

From: Joann Peck, Associate Dean of Undergraduate Business, UW-Madison

Re: Certificate in Business Management for Agricultural and Life Sciences

I want to let you know that the Wisconsin School of Business is supportive of your newly proposed "Certificate in Business Management for Agricultural and Life Sciences." We are happy to provide the online versions of both General Business 310, Fundamentals of Accounting and Finance for Non-Business Majors and General Business 311: Fundamentals of Management and Marketing for Non-Business Majors. At your request, to better accommodate your students, we have also had our curriculum committee approve and change the prerequisite from junior to sophomore standing for these classes.

Sincerely,

Joann Peck
Associate Professor, Marketing Department
Associate Dean of Undergraduate