Learning and Leadership Sciences Undergraduate Minor Proposal

1. Name of the proposed minor:

Applications of Learning and Leadership Sciences

2. Name of the academic units involved:

Agricultural and Biosystems Engineering, Agricultural Education and Studies, Agronomy, Animal Science, Food Science and Human Nutrition, Horticulture, Human Development and Family Studies, Kinesiology, Management, Natural Resource Ecology and Management, School of Education, Sociology

3. Name of contact persons:

Jan Thompson (NREM-CALS), Suzanne Hendrich (FSHN-CHS)

4. Need for the proposed minor:

Our overarching goal is to significantly increase the number of ISU graduates who consistently engage in productive thinking, enabling them to lead in their professions and contribute to society and their communities. To accomplish this goal, we propose to develop and deliver innovative, experiential learning and leadership-focused courses for students. Although small numbers of strongly self-directed students are able to achieve these goals within our traditional curricula, what we propose to create is a transdisciplinary minor, including a specific set of courses and experiences designed to purposefully prepare greater numbers of students to become responsible learners, leaders, professionals, and committed community members. The coursework we propose builds on the curriculum of a student's primary discipline to enhance student leadership abilities throughout their academic career and beyond. We propose to focus on developing students' abilities to engage in productive thinking, and our overall model for helping students develop the necessary self-knowledge and leadership skills builds on and broadens the traditional discipline-based approach to college education. Our understanding of productive thinking includes the specific habits of mind required for different kinds of thinking (including, but not limited to critical, analytical, and creative thinking in problem-solving); discerning the types of thinking required when presented with new situations; and developing the fluent, habitual use of such thinking to address issues and situations as professionals and citizens. We propose to immerse students in experiential learning with emphases placed on eight competency areas that are critical for leaders: 1) understanding self and personal responsibility for learning, 2) understanding worthy team membership, 3) developing productive thinking and creative problem solving abilities, 4) developing resiliency, 5) negotiating and resolving conflict, 6) action planning for providing service, 7) communicating, and 8) recognizing and acting on the obligation to "do" leadership every day.

5. Objectives of the proposed minor (including the student learning outcomes and how the learning outcomes will be assessed):

Examples of learning experiences in our proposed curriculum that will distinguish this minor from other leadership programs include: (1) confronting beliefs about learning and leadership to be open to new ideas, (2) using selected applications of learning theories as a student, (3) engaging in leadership every day, (4) identifying individual strengths, vulnerabilities, dispositions, values, beliefs, and biases, (5) developing and implementing action plans for growth and development as a leader, (6) applying knowledge about human learning to specific leadership tasks, (7) applying knowledge of group dynamics in leadership practice, and (8) engaging in metacognition as the beginning of deeper thinking.

Students in the Applications of Learning and Leadership Sciences Minor will ultimately achieve these learning outcomes by uncovering and practicing:

- habits of deep self-reflection about learning and application of these habits to their professional and community lives;
- effective interaction with others in professional and community settings, including abilities to listen actively, communicate clearly, resolve conflicts, and negotiate desired outcomes;
- habits of professional thinking, including accountability, initiative, innovation, resilience, tolerance, and profound respect for others.

6. General description of the minor:

The proposed minor will build on the Academy for Leadership and Learning (ALL), a USDA Higher Education Challenge Grant-funded project that has already implemented a two-course introductory sequence in leadership and learning, including NREM 112 (currently co-listed with FSHN, HORT, and TSM, but herein proposed as LLS 112), Foundations of Learning and Productive Team Membership (2 cr.), and NREM 114 (proposed as LLS 114), Developing Responsible Learners and Effective Leaders (2 cr.).

We propose to further develop a new 2-credit course focused on Habits of Mind and Decision-making in Leadership (LLS 212), a 2-credit Problem-solving and Action Planning in Leadership (LLS 312), and a 3-credit practicum (service learning) Leadership and Learning in Practice course (LLS 412). The new LLS 212 course will include experiential learning focused on development and application of critical, analytical, and creative thinking as they apply to leadership. The new LLS 312 course will form a bridge between the "theory" courses (LLS 112, 114, 212) and the practicum course (LLS 412). The 312 course will include practice of action planning using realworld problems with options available to students to formulate a problem focus (e.g., students may work with a community organization to frame a problem). Then, the practicum project, performed in teams with faculty mentorship, will combine advanced study of leadership and learning with practices of effective action (framing a problem, justifying approaches, taking action, getting feedback and planning new actions) coupled with continual reflection and feedback on ability development, all part of LLS 412. The 212-412 course sequence will be developed and initially led by Drs. Licklider and Wiersema, modeled after current courses offered in the Information Assurance

"CyberCorps" curriculum. Faculty members identified herein as mentors will guide student teams in their disciplines who are conducting their practicum projects. Additional participating faculty members (Thompson, Haynes, Hendrich) will provide rotating facilitation in 112, 114, and 212.

These unique 11 credits will be supplemented by at least 4 credits from courses (200 level and above, with at least 1 of the 4 credits at 300-level or above) that may also count within the students' majors, but are focused on developing interpersonal skills, crosscultural abilities, conflict resolution, and communication abilities (including but not limited to courses such as AESHM 211X, Leadership Experiences and Development; FSHN 342, World Food Issues; AG ED 315, Personal and Professional Leadership in Agriculture; MGMT 371, Organizational Behavior; SOC 330, Ethnic and Race Relations; SOC 464, Community Action and Leadership; NREM 460, Controversies in Natural Resources; T SC 341, Technology: International, Social, and Human Issues; HD FS 370, Communication in Family Development; LAS 322, Leadership Styles and Strategies; and a number of Military Science courses (MS 202L – MS 410). Students will create personalized plans of study in which they provide a rationale for 4 credits of minor elective course choices (including additional courses which they propose) to meet their educational needs and career goals, in consultation with the broader group of program faculty identified below. Students will also develop Learning and Leadership Sciences portfolios during the program to be submitted in final form as part of the LLS 412 practicum course. Students will use their LLS portfolios to demonstrate their abilities in the eight competency areas identified for effective leaders, which will also be reviewed and evaluated by program faculty.

7. Relationship of the minor to other programs at Iowa State University:

No other such minors currently exist, although there are a number of leadership experiences and opportunities provided at ISU; a diverse array of leadership opportunities, including those for credit, should exist, because leadership can be approached effectively from a variety of perspectives. The Student Activities Center offers a "Leadership Journey", intended for officers in student organizations. The Hixson and Carver Scholars programs include leadership components. The ROTC program offers a large number of relevant courses in Military Science. There are Deans' Leadership classes in some colleges, and the President's leadership class. In addition there are a small number of certificate programs, including the Community Leadership and Public Service Certificate offered through the Catt Center, a more specific certificate for Engineering Leadership, also facilitated by the Catt Center, and the Gerdin Citizenship and Leadership in Action Programs, offered for students in the College of Business. The College of Business also includes leadership elements in selected courses within the Management major. Finally, the Public Service and Administration in Agriculture program includes leadership elements. The proposed minor is different from these programs in terms of structure, content, and/or emphasis in the following ways. First, the structure of the proposed Learning and Leadership Sciences Minor includes an integrative sequence of five required core courses that will create and engage students in cohort groups beginning in the first semester of their freshman year, and that will move together through the program's four-year curricular elements. Within each cohort group, strong emphasis will be placed on

learning in community, and development of team membership skills. Second, the proposed LLS minor program will facilitate students' explorations of the foundations of human learning and its applications to individual growth and development, effective team membership, and leadership, culminating in student development of a portfolio and participation in a leadership practicum. Finally, through the core curriculum students enrolled in the LLS minor will develop enduring understandings of leadership through guided practice in structured situations with continuous feedback over the duration of their studies. The proposed minor includes coursework that already is or will be available as elective credits to students enrolled in the previously identified certificate programs, and further opportunities for cross-program cooperation will be actively pursued.

8. Relationship of the minor to the college's/university's strategic plans:

The vision articulated in Iowa State's strategic plan for 2010 - 2015 clearly identifies the need to "prepare the leaders of our nation and our world". Further, the strategic plan identifies the priority of providing "high quality student life that engages and challenges students to collaboratively learn, grow, and succeed as resilient global citizens and involved alumni". Our proposed program directly supports these strategic goals and priorities by taking a student-centered and collaborative learning approach to development of learning and leadership skills. The College of Agriculture and Life Sciences has identified preparing students to become "civic-minded, globally oriented, graduates who are well-prepared to address society's challenges as leaders in agriculture and life sciences" as part of the college's core mission. Our proposed minor will directly support the efforts of the College and it's member departments by developing students' skills in learning, advancing their use of critical habits of mind, and providing opportunities for students to explore facets of leadership and use leadership skills in action to serve their communities. In addition, we will help accomplish these goals by supporting faculty and staff members who wish to facilitate these important dimensions of student learning.

9. Comparison of the proposed minor with:

a. standards, if any, established by accrediting associations:

The educational standards of various professional organizations related to our departments are consistent with this minor by supporting development of professional skills including communication, critical thinking, professionalism, lifelong learning, interactive (teamwork) skills, information acquisition and organizational skills as necessary components of undergraduate education. This minor specifically includes these skills, and is thus well-aligned with professional standards of most disciplines.

b. similar programs at other universities.

The University of Iowa offers a Certificate in Leadership Studies based on 21 credits of coursework that includes one 3-credit core course, 15 hours of restricted elective credits, and 3 credits of "experiential learning" which are documented by the student. The University of Iowa also offers a 4-semester Career Leadership Academy through the Pomerantz Career Center, which is focused on leadership in career contexts. Both the structure and the content of these programs are different from our proposed minor.

The University of Northern Iowa offers executive leadership development certificate programs through the College of Business Administration, which focus on career enhancement opportunities for persons in business professions (post-graduate). UNI also offers a one-day Leadership Challenge course through their Student Involvement Center. This program is open to all students, but is a single event targeting leaders of student organizations.

Several peer institutions in nearby states offer leadership programs, primarily leadership certificates. The University of Wisconsin offers a Leadership Certificate through their Center for Leadership and Involvement. The College of Agriculture at Purdue University offers a Leadership Certificate based on student-documented on and off-campus experiences, 6 credits of selected coursework and workshops, and development of a portfolio. Purdue University, the University of Illinois, and the University of Wisconsin have combined to offer a single online leadership development program based completion of a series of modules available for download. The University of Missouri offers a "Leadership Academy", which is a conference designed for students who serve in leadership positions in student organizations. The University of Nebraska-Omaha offers an "Emerging Leaders" program, also structured to assist students in leadership positions, which includes a one-semester core course and other guided activities with mentors. These opportunities differ from our proposed minor in that they are primarily certificate programs, have fewer foundational courses and more elective courses, and are targeted toward positional leaders and rely heavily on position-based leadership "practicum" experiences.

From these examples, it is clear that many universities are providing educational activities related to leadership, and our proposed minor is distinct from all of them based on our focus on experiential learning, linkages between learning and leadership, and our premise that leadership is not limited to roles associated with particular positions.

10. Program requirements, including:

a. prerequisites for prospective students:

None to enroll in LLS 112, although LLS 112 is a prerequisite for 114, and each subsequent course is a prerequisite for those that follow.

b. language requirements:

None

c. courses and seminars presently available for credit toward the program:

Courses that are currently offered that would become part of the foundational curriculum include NREM (FSHN, HORT, TSM) 112 and 114. Additional courses that will fulfill the 15-credit requirement may include a number of other courses as previously indicated (e.g. AESHM 211X, FSHN 342, AG Ed 315, LAS 322, and others as proposed by students in their plans of study).

d. proposed new courses or modifications of existing courses:

We propose development of three new courses, LLS 212, LLS 312 and LLS 412 to further refine students' thinking skills, provide a bridge between theory and

practice, and to provide a supervised leadership practicum (as previously described).

e. implications for related areas within the university:

This minor will support other leadership education efforts on the Iowa State campus by providing additional courses focused on leadership, and it potentially could serve a large number of departmental and interdepartmental majors by creating more opportunities for students interested in developing leadership skills and combining those skills with their disciplinary studies.

11. General description of the resources currently available and future resource needs, in terms of:

a. faculty members

We have a core group of five faculty members--Suzanne Hendrich (FSHN), Jan Thompson (NREM), Barb Licklider (SoE), Cindy Haynes (HORT), and Jan Wiersema (NREM-SoE-INFAS) -- who are committed to the development of this minor and to facilitate the foundational courses in it. Additional faculty members who represent units which many of our previous students have come from, and who have already agreed to guide student practicum projects and evaluate student LLS portfolios include Steve Freeman and Gretchen Mosher (ABE); Mike Retallick and Awoke Dollisso, (AG EDS); Mahdi Al-Kaisi, Laura Merrick, and Michael Thompson (AGRON); Stephanie Hansen and Sherrlyn Olsen (AN SCI); Erin Bergquist (FSHN); Gail Nonnecke (GLOBE); Elizabeth Stegemoller (KIN); Marc Anderson (MGMT); Julie Blanchong and John Tyndall (NREM); and Beth Hartman (CCEE). Core faculty will make every effort to assist students in selecting a mentor in their respective major programs, and to invite, include, and assist those faculty members as they mentor the students involved in the minor.

b. effects of the new courses on the work load of the present staff:

The proposing faculty members have experience facilitating 112 and 114, with leadership and course development expertise provided by Drs. Jan Wiersema and Barb Licklider. We anticipate rotating responsibilities for the foundational courses, but each participating core faculty member will cofacilitate at least 2 credits per year in addition to their primary (departmental) teaching responsibilities, or will seek release from other responsibilities to allow participation in this minor. Initial leadership for two of the new courses (312 and 412) will be provided by Drs. Wiersema and Licklider.

c. research facilities:

None needed beyond existing facilities.

d. library facilities (journals, documents, etc.) in the proposed area: None needed beyond existing library resources.

e. supplies, field work, student recruitment, etc:

A small supply budget will be required for brochures to be used at college orientation events to recruit for our introductory courses), and for course materials, approximately \$2,000/year.

12. Describe the needs for new resources and/or reallocated resources. Attach to the program proposal memos from the department chair(s), the college dean(s), and other appropriate persons, agreeing to the allocation of new resources and/or the reallocation of resources.

The proposed program will require support for two full-time lecturer positions and two half-time 12-month Graduate Teaching Assistants to provide adequate facilitation for all five foundational courses in the program (please see attached letters of support). We expect this support could be phased in over a 2 to 3-year period. Based on current enrollments in 112 and 114, with the availability of a minor we anticipate initial enrollments of approximately 50 students in LLS 112 (2 sections), 45 in LLS 212 (2 sections), 40 in LLS 114 (2 sections), 25 in LLS 312 (1 section), and 20 in LLS 412 (1 section). We will actively recruit among incoming students via several venues including campus orientation events as well as through the ISU Learning Communities program (please see attached memo) to attract students to the minor. Additional TA and lecturer support will be required as the program develops. We expect that enrollments will increase as the program gains visibility and as we further develop ties to other programs at ISU (e.g. Global Resource Systems, PSA).

- 13. Attach to the program proposal, letters of support, recommendations, and statements when appropriate:
- a. from programs at the other Regents universities:
 Not applicable.
- b. from programs and departments at ISU which are associated with the proposed program or have an interest in the proposed program:

Please see attached letters/memos of support from the Chairs of the Departments of Agricultural Education and Studies, Agronomy, Animal Science, Food Science and Human Nutrition, Horticulture, and Natural Resource Ecology and Management, the Program Coordinator for Learning Communities, the Director of the Information Assurance Center (College of Engineering), the Interim Director of the School of Education, the Associate Dean of the College of Business, the Associate Dean for Undergraduate Programs of the College of Human Sciences, and the Associate Dean for Undergraduate Programs, College of Agriculture and Life Sciences.

14. If the new program is interdisciplinary, a governance document should be created and submitted to the Associate Provost for Academic Programs. Indicate here that it has been completed.

Please see attached governance document.

Applications of Learning and Leadership Minor Governance Document

I. Mission Statement

The interdisciplinary Learning and Leadership minor is intended to significantly increase the number of ISU graduates who consistently engage in productive thinking, enabling them to lead in their professions and contribute to society and their communities. We work together as faculty to develop our abilities to help students learn productive thinking, i.e., intentional mental processing, and to apply this type of thinking in their professions and lives.

II. Faculty

Every ISU faculty member is eligible to serve on the faculty of the LLS minor, providing the faculty member is approved to participate by her or his home department. All faculty members wishing to participate in the LLS minor should submit a *curriculum vitae* to the coordinating committee, a brief statement of interest, and evidence of approval from the department chair of the home department. Additions of LLS faculty members will be decided by a majority vote of current program faculty members. Individuals who are not members of the ISU faculty may serve as advisors to the program at the discretion of the coordinating committee.

III. Students

Any ISU undergraduate may declare LLS as a minor. They will work with program faculty members to create individualized programs of study that complement their professional and personal goals. Students will complete a set of required core courses and electives to fulfill curricular requirements consistent with ISU policies on minors.

IV. Administration

A program chair and an associate chair will administer the program, and each will be elected separately to a two-year term by the entire faculty of the program. The chair is responsible for carrying out program policies, administering the budget, serving as a conduit between program faculty members and university administrators, supervising office staff, and insuring that inquiries about the program are answered. The associate chair assists the chair in carrying out administrative duties and represents the program when the chair is unavailable. After her or his two-year term is completed, the associate chair typically is expected to be a candidate for the chair's position. To become chair, the associate chair must be confirmed by a new election (see section VI). Rotation of the chair and associate chair positions among departments participating in the program is desirable. Program policies shall be set by the program's coordinating committee, The coordinating committee is also responsible for supervising standing committees (curriculum, funding/development/promotion and publicity) and various ad hoc committees. The coordinating committee consists of the program chair, the program associate chair, two student representatives, and one representative from each participating department. A department participates in the program by having one or more members accepted into the LLS faculty. It is at the discretion of each participating department whether or not to have a representative serve on the coordinating committee. Ordinarily, the chair and associate chair will not be considered their home department's representative on the coordinating committee. A departmental representative, when faced with a scheduling conflict, may designate a representative or proxy from the same department to attend a coordinating committee meeting, make comments and vote in his or her place. If a member of the LLS faculty is not available to serve as a proxy, a nonmember may be designated. The student representatives can similarly designate a proxy from the LLS student body. Departmental representatives on the coordinating committee serve for twoyear terms that start on 1 July. These two-year terms will be staggered such that half of the departmental representatives are replaced each year. At the inception of the program, half of the departmental representatives will be appointed to three-year terms, and half will have two-year terms. Meetings of the coordinating committee may be convened regardless of numbers of attendees, although every effort will be made to schedule meetings to maximize attendance. A simple majority of the coordinating committee is required for a quorum on any vote. Each member of the coordinating committee, including the chair and associate chair, shall have one vote. The decisions of the chair and associate chair may be overridden by a majority of the coordinating committee. Ties do not constitute an override. Cases of disagreement between the program faculty and either the chair, associate chair, or the coordinating committee shall be handled through referenda (see below). Standing and ad-hoc committees shall be comprised of members of the LLS faculty and students. Student members are encouraged to participate and to vote on all policy matters but will be excused from confidential discussions of individual students and applicants. Committee chairs will determined by the committees and will normally serve two year terms from 1 July of even-numbered years until 30 June, two years later.

V. Meetings

The chair will be responsible for convening meetings of the coordinating committee and the program faculty on a regular basis during the fall and spring semesters. Typically, the coordinating committee will meet monthly and the program faculty will meet once each semester.

VI. Elections and Referenda

All members of the LLS faculty will be eligible to vote for the chair and associate chair of the program. Election to the chair and associate chair positions requires that at least 60% of the program faculty vote. Election decisions are determined by the majority of votes cast. In the event that no candidate receives a majority, a run-off election will be held between the two candidates for each position who received the highest number of votes. If no candidate receives a majority and the number two and number three candidates are tied for votes, then lots will be drawn by candidates two and three to decide who will run against the number one candidate. Department representatives on the coordinating committee will be elected by caucus from within each respective department. All department representatives must be members of the LLS faculty. All elections will be held in spring semester of odd-numbered years. The chair and associate chair of the program shall assume their duties on 1 July of odd-numbered years and serve until 30 June, two years later. In the case of the need for mid-term replacement of the chair or associate chair due to resignation or other circumstances, a special election will be called by the coordinating committee. In the event of major disagreements between the program faculty and either the chair, associate chair, or coordinating committee, issues may be decided by a referendum vote. A referendum may be brought forth to the program faculty at any time if at least three members of the program faculty communicate their support for it, in writing, to the coordinating committee. The referendum must be posted to the program faculty within one week of it being brought to the coordinating committee by the minimum of three program faculty members, with a time-limit for response of not more than two weeks. A majority of those voting must approve of a referendum for it to pass, and at least sixty percent the program faculty must vote for the results of a referendum to be valid.

VII. Changes in the Governance Document

Changes to the governance document of the LLS minor shall be proposed in writing to the faculty at least two weeks before a meeting of the LLS faculty at which they will be considered. Provision shall be made for electronic ballots to be cast during a two-week balloting period. A valid vote on proposed changes to the governance document shall require that at least 60% of the LLS faculty cast a ballot. A majority of those voting at the meeting and electronically must approve of a proposed change for it to pass.