The Faculty Manual of Washington State University (WSU) states the official criteria and procedures for advancement to tenure and promotion in rank. The following text supplements these guidelines and explains their application in the College of Arts and Sciences (CAS). The criteria reflect the goals of the College of Arts and Sciences; the procedures provide a framework for evaluation and ensure due process for the candidate. Professional evaluation is based on informed judgment, which must be sound, adequately sampled, carefully reviewed, and subject to appeal. In this document "department" is used for any academic unit (department or school) with tenure and promotion responsibilities; “Chair” is used for the Chair, typically either a Chair or a Director. Departments augment this document with criteria and procedures specific to those departments. The College expects Departments to form and implement effective mentoring committees for untenured, tenure-track faculty. Their function is to advise on various local and discipline-specific aspects regarding teaching, research, scholarship, creative activity, service, and progress towards tenure and promotion.

Nothing in this or departmental documents should be construed to be in conflict with the broader statements of the university or the Faculty Manual pertaining to tenure and promotion. In case of apparent conflict, university and Faculty Manual rules take precedence. In the document below, we refer to the Faculty Manual several times. The current Faculty Manual is found on the web at http://www.wsu.edu/Faculty_Senate.

An additional level of oversight is required for faculty at the urban campuses (WSU Spokane, Tri-Cities, and Vancouver). In general their annual reviews, tenure reviews, and consideration for promotion require input from both Pullman and the urban campus, and the signature of the urban campus vice chancellor. These issues are addressed below.

Cases for early promotion and/or tenure must be justified by extraordinary merit and permission to bring the case forward must be obtained from the Provost before the case is prepared. With the agreement of the faculty member, the Chair sends a memo to the Provost, via the Dean (for signature), making the case for early promotion and/or tenure. Although extraordinary merit is necessary for early consideration, the College criteria for receiving the promotion and/or tenure remain the same.

**FORMS OF RESEARCH, SCHOLARSHIP, AND CREATIVE ACTIVITY**

As a multi-disciplinary and forward-facing unit, the College of Arts and Sciences recognizes that a faculty member’s work in research/scholarship/creative activity, as well as in teaching and service, will likely take many forms over the course of a career. The College thus maintains an expansive view of scholarship that recognizes the value of multiple modalities and reaching multiple audiences.
Statement on Interdisciplinary Research, Scholarship, and Creative Activity

Many of the most compelling and challenging questions faculty pursue necessarily involve theories, techniques, and evidence that cross institutionalized and/or disciplinary boundaries. Pursuing such interdisciplinary questions in a program of research, scholarship, and creativity may mean that a faculty member may develop a profile that differs from those concentrated in a single discipline. For example, the faculty member may pursue more collaborative ventures (formal or informal), learn and employ multiple methodologies, and present or publish in a variety of outlets.

Given this potential diversity, candidates for tenure and/or promotion are thus encouraged where appropriate to explain within their promotional statements the significance and/or value of their cross-disciplinary work, as well as how that work contributes to their larger professional profile within their department and scholarly field(s). Candidates who have pursued sustained work in these areas may also wish to identify among their suggested external reviewers at least one evaluator experienced in one or more of the associated fields outside the core-discipline connected with the interdisciplinary work. For its part, to the extent that the candidate’s work meets the foundational expectations of coherence, significance, and peer review, the College values interdisciplinary research, scholarship, and creative activity at the same level as it values these activities within the candidate’s core discipline.

Statement on Public and Community-Engaged Research, Scholarship, and Creative Activity

In keeping with WSU’s land-grant mission, the College of Arts and Sciences also values research, scholarship, and creative activity that actively seeks to communicate to, and engage with, audiences outside of the academy. The College recognizes that such activity may require significant work in relationship building and/or career exploration. Such activity also may often result in products that are multi-disciplinary, appear in non-traditional or specialized venues, share authorship with non-academic or community partners, and combine work in categories (such as teaching and service) more often reviewed separately.

As such, the evaluation of public and community-engaged scholarship may entail considerations different than those applied to disciplinary- and academically-based work. In assessing such work, the College values clarity of goals; intellectual rigor and creativity in content, methodology, or design; opportunities for ongoing and/or future collaboration and engagement; effective communication with appropriate audiences; and impact. Impact may be assessed by indices such as financial support offered by granting agencies and external partners, presentations at recognized scholarly and public meetings, measurements of engagement (such as citations, number of online views or downloads, and other quantitative scales), adoption of work products by academic or non-academic institutions, policy influence, and resonance with identifiable communities. Letters of support detailing this activity and its impact can be included among a candidate’s materials.

The College recognizes that public and community-engaged work may introduce considerations unfamiliar to internal and external reviewers not trained in similar work. Where appropriate, candidates for tenure and/or promotion are thus encouraged to articulate their understanding of such considerations in the research statement and/or CV. Candidates who have pursued sustained work in these areas may also suggest among their possible external reviewers one or more evaluators (academic or non-academic) possessing significant experience in relevant
communities of practice. It is the policy of the College to treat such evaluations equally with those drawn from more traditional academic sources.

**TENURE**

**Criteria**

The areas of evaluation in considering eligibility for tenure are: (a) research, scholarship or creative activity, (b) classroom and individual instruction, (c) external funding at a level appropriate to the candidate’s discipline, (d) interactions with colleagues and students, as well as the supervision of graduate students and advising and mentoring of undergraduate students, (e) participation in professional activity, (f) participation in departmental and university service. Except in instances in which written agreement specifies otherwise, in the College of Arts and Sciences tenure will not be recommended unless excellence in both instruction and research/scholarship/creativity activity can be satisfactorily demonstrated. The university and college have adopted the teaching portfolio (College policy and format appended, Appendices 1 and 2) as the means of documenting excellence in instruction. In view of the responsibilities of the faculty in university governance, judicious and effective participation in departmental and extra-departmental assignments is also expected. Normally, tenure and promotion to Associate Professor should be considered simultaneously.

Each academic department of the College of Arts and Sciences must develop a statement of departmental criteria and procedures supplementing those outlined here. The statement is to be on file in the department, college office, faculty senate office, and in the Provost’s office.

**Procedures**

Copies of the department and college criteria for tenure and promotion will be provided to new faculty hires, no later than at the time when the offer is made, normally the criteria are sent with the letter of offer. For joint appointments, the letter of offer will specify which department will be the lead for annual evaluation and tenure and promotion.

It is the responsibility of each untenured faculty member to maintain an academic biography that provides material bearing on the criteria identified above. It is the joint responsibility of the faculty member and the Chair to assure that the dossier presents the case fully, clearly and accurately.

**Annual Evaluation of Progress Toward Tenure**

Evaluations of the progress of untenured faculty members are to be conducted at the departmental level once a year. The purpose is to advise and direct progress towards tenure or to recommend termination of employment. This review should assess the faculty member’s cumulative progress towards tenure. Progress Towards Tenure Reviews should be done at the same time of year as annual reviews, and they should usually lead logically to the final tenure decision. Similar to the annual review, the urban campus administrator should be consulted when reviewing the progress of faculty members at urban campuses.

Unlike the annual review, the progress towards tenure review is based on cumulative performance and requires the participation of all tenured faculty in the department. The Chair
must also discuss the outcome of the review with the untenured faculty member. The purpose of
the discussion is to aid the faculty member in understanding how tenured members view his or
her performance in light of the departmental/college criteria and expectations.

If the candidate resides on a campus other than Pullman, the Chair will seek information from
relevant individuals at that site. These must include faculty tenured in the department and the
appropriate urban campus administrators.

A dated written summary of the discussion of these results and of the implications shall be
signed both by the department Chair and the untenured faculty member. The faculty member
shall have the right to append a statement concerning this summary; the statement will become a
permanent part of the record. A copy of the signed summary is to be provided to the faculty
member, the Dean, and, if applicable, to the urban campus CAS Director. The policy for this
progress towards tenure review can be found in the Faculty Manual, Section III.3.d.

The process can lead to a recommendation that employment be terminated before the end of the
pre-tenure period. The procedure is outlined in Section III.F.1. "Nonreappointment"
http://facsen.wsu.edu/faculty_manual/.

**Third Year Review**

Every tenure-track faculty member with a pre-tenure period of six years undergoes a formal
“third year” tenure-progress review in the spring of his or her third academic year at WSU. The
purpose of this review is to identify relevant strengths and deficiencies with regard to progress
towards tenure. The review shall be conducted following the procedures which apply to the
tenure review, except that outside letters are not required. The timing for the formal third year
review should be negotiated at the time of appointment for faculty appointments with a pre-
tenure appointment less than six years. The third year review is optional for faculty
appointments with a pre-tenure period less than three years. The complete policy can be found
in Section III.D.2.e. of the Faculty Manual http://facsen.wsu.edu/faculty_manual/. For urban
campus faculty, information must be obtained from the location by the department Chair.

After consultation with the tenured faculty, the department Chair will make a recommendation
that the candidate is well prepared for tenure and/or promotion, or that the candidate’s progress is
satisfactory, needs improvement, or is unsatisfactory. The recommendation is to be forwarded to
the Dean and, if applicable, to the urban campus vice chancellor. The Dean will prepare and
forward a recommendation to the Provost, along with the case materials and Chair's
recommendation. The vice chancellor, if applicable, writes a separate recommendation. The
Dean and, if applicable, the vice chancellor, will then reach an agreement with the Provost on
retention or nonreappointment.

The purpose of this review is to identify relevant deficiencies with regard to progress towards
tenure. The faculty member, Chair and Dean will receive a letter from the Provost stating the
outcome of the Third Year Review. After the candidate receives the Provost’s letter, the Chair
must meet with the candidate and discuss the review. In the event the Chair is unavailable, the
meeting and discussion should be held with the Dean (or vice chancellor in the case of faculty at
the urban campuses). Where the results are judged unsatisfactory, the third-year tenure progress
review can lead to nonreappointment as described in section III.F.1.
**Tenure Review**

At the time of faculty tenure consideration as specified in their letter of offer (or at hire, for faculty being hired with tenure at senior ranks), the candidate and the Chair shall jointly assure that the case materials as specified by the Provost’s office are complete. In particular, the following shall be included in the confidential file:

(a) curriculum vitae;
(b) A total of up to 10 relevant research publications, other scholarly and creative contributions and manuscripts in press that together make a compelling case for tenure;
(c) a research statement of no more than two pages;
(d) confidential letters from at least five well qualified external reviewers evaluating the quality of the candidate's published research or other evidence of scholarly activity, the contribution to the candidate’s profession and discipline, and the candidate’s professional reputation.
(e) a teaching portfolio (no more than 5 pages of narrative) in the format adopted by the university and College of Arts and Sciences (see Appendices 1 & 2); and
(f) a service statement of no more than two pages.

A statement of context may be included but is not required. If a Context Statement is included it should be limited to two pages.

Submitted publications and contributions should have been generated while the candidate held a faculty position at Washington State University unless the faculty member has been granted time off of the tenure clock for work done elsewhere. If the selected materials have co-authors or co-investigators, it is the responsibility of the candidate to indicate clearly his/her role in those publications/contributions.

Every review letter that is solicited (by the Chair) and received should be included. The reviewers shall be selected by the Chair, and may include ones suggested by the candidate, but should not include present or former collaborators of the candidate, coauthors or thesis/post-doctoral advisors. The majority of letters should not be from the reviewers on the list provided by the candidate. Letters from other WSU faculty are not acceptable. Under no circumstances will a reviewer be paid or compensated in any way for reviewing the candidate’s file or writing a letter.

Following the review of the file and discussion of the record among themselves, the tenured faculty members shall provide recommendations by way of confidential, signed faculty recommendations, a sample of which is supplied in the Tenure and Promotion Guidelines distributed by the Provost’s office. The Chair shall assure that every tenured member (including those on leave, if practical) has an opportunity to review the record and to complete a faculty tenure recommendation form. The Chair must also convey to the faculty the responsibility to participate in the evaluation process and to provide a rationale for their recommendation, whether it is positive or negative. Faculty who have appointments that might provide more than one occasion to participate in evaluations must do so only once. If the candidate resides on a campus other than Pullman, the Chair will seek information from relevant individuals at that site. Note the following requirement specified in the Faculty Manual: “At least five persons who are thoroughly familiar with the attainments of the eligible faculty member must complete this tenure form. When there are not five tenured faculty members in the department, the tenured members shall recommend additional such persons through the Dean to the Provost, who shall
determine which of these persons will complete the tenure form.” The Chair’s recommendation does not count as one of the five.

The Chair shall collate the results and all files are uploaded to a SharePoint site as specified by the Office of the Provost. It is college policy that faculty tenure recommendations and letters of recommendation are privileged information and are to be handled as such. They are not to be shared with the candidate without an official Public Records Request.

All personnel involved with tenure and promotion should realize that state and federal public disclosure laws may limit confidentiality of the file (including faculty recommendation forms and outside letters). The Provost’s office recommends qualifying statements to be used on all requests for letters of recommendation.

The Dean presents all tenure cases to the College Tenure and Promotion Committee. The committee usually consists of 9 members, all tenured Professors or Associate Professors selected by the Dean with recommendations from the Chairs. The Associate Professors and Professors will recommend on tenure and promotion to Associate Professor. Only Professors will recommend on promotion to Professor. The members review and discuss the record of each candidate, the summary of the departmental evaluation, and the Chair’s recommendation. The Chair normally appears before the committee to discuss the candidate’s case. Each member records a recommendation on a confidential ballot forwarded to the Dean. All proceedings of the College Tenure and Promotion Committee are confidential. The members’ recommendation forms are advisory to the Dean.

The Dean reviews the cumulative record, obtains written input from the urban campus vice chancellor, if applicable, and forwards a recommendation and the documentation to the Provost. The Provost’s office generates letters to the faculty members with copies to the Chairs and the Dean. As determined by the Provost’s office, there is a period of three days when these letters are to be distributed to the faculty. The Provost’s office notifies the Dean’s office of the three day notification period and when the letters are ready. The Dean’s office distributes the letters to the department Chairs and they distribute them to the faculty members, all on the same day. For faculty at an urban campus, the Dean’s office express mails the letters to them and a copy to the urban campus CAS Director to insure that all faculty receive their letters on the same day. Tenure review shall result in either the granting of tenure, to become effective at the beginning of the next academic year following the year in which the tenure review is conducted, or denial of tenure together with the offering of a one-year terminal appointment. The policy for appeal of denial of tenure follows procedures stated in the most recent update of the Web Faculty Manual, Section III.F.1.

**PROMOTION**

**Criteria**

The basic criteria are those outlined above for evaluating tenure. Time in rank is not sufficient by itself. Consideration for promotion is based on the quantitative and qualitative characteristics of the candidate's cumulative record. Additional criteria for the ranks are listed below.

Promotion to the rank of Associate Professor will depend upon adequate demonstration of the candidate's sustained excellence in the following: scholarly and/or creative contributions; effort and success in obtaining external funding at a level appropriate to the candidate’s discipline, if
such is required for support of the candidate's research/professional program; supervision of graduate students; and, undergraduate and graduate instruction. Effective participation in departmental and extra-departmental service is also expected. Normally, promotion to Associate Professor and tenure should be considered simultaneously.

For promotion to the rank of Professor, in addition to the cumulative qualifications already summarized, a candidate must present evidence of national recognition, reputation for sustained scholarly competence, and an increased level of professional activity. This evidence may include but is not limited to a substantial body of publications, scholarly or creative contributions, a well-established research program with a substantial record of external funding at a level appropriate to the candidate’s discipline, effective use of professional leave and other opportunities for self-improvement, service as an editorial referee or editor of learned journal(s), consulting, and invitations to speak to professional societies. The progress made since the faculty member achieved tenure should be clearly indicated. Candidates for promotion to professor must have made substantial progress beyond the work submitted for promotion to associate professor. For example, research publications, scholarly/creative contributions or grants responsible for a favorable tenure decision will not be considered to justify promotion to Professor. Documented evidence that the quality and quantity of the accomplishments of the candidate are at a significantly higher level than that expected of an Associate Professor is required. It should be emphasized that, if instruction is part of their assignment, individuals who cannot present a record of continuing excellence in instruction will not be considered favorably for promotion to the rank of Professor. For promotion to professor, an individual must also exhibit mature leadership qualities that are essential for the progress of the department. A teaching portfolio (no more than 5 pages for the narrative) must be included with the promotion materials. On occasion, the rank of Professor will be recommended for individuals who excel in instruction and show clear and convincing evidence of a statewide or national reputation in teaching. Evidence may include publications in refereed pedagogical journals, recognition by organizations external to WSU, and funding for creative activities in instruction.

The rank of Professor is a faculty rank. As a result, administrative service usually will not justify promotion to Professor, no matter how excellent the work. Administrators can be rewarded for their contributions in other ways (e.g., through stipends and/or salary increases). Faculty members accepting heavy administrative burdens before achieving the rank of Professor may jeopardize their opportunity to meet the standards of teaching and scholarship necessary for promotion.

Only under exceptional circumstances will a faculty member be considered for promotion to Professor prior to serving as an Associate Professor for fewer than five years. In such instances, prior approval for consideration for promotion to Professor must be obtained from the Provost, via the Dean.

**Procedures**

The procedures of documentation and review for promotion in rank are similar to those outlined for tenure review.

Nominations for promotion normally originate with the Chair. Documentation, including letters of evaluation from at least five external reviewers, will be assembled by the Chair and presented for consideration to the tenured departmental faculty members holding academic rank higher
than that of the candidate. Under no circumstances will a reviewer be paid or compensated in any way for reviewing the candidate’s file or writing a letter. If the candidate resides on a campus other than Pullman, the Chair will seek information from relevant individuals at that site.

The individual faculty member may initiate his/her promotion to full professor. In such cases, that faculty member may request that the file be forwarded to the Dean, even if the Chair’s recommendation is negative. The documentation, including letters of evaluation from external reviewers, will be assembled by the Chair and presented for consideration by relevant tenured department faculty members in accordance with departmental procedures.

The Chair presides at the deliberations of the departmental faculty and determines whether to forward a recommendation for promotion and the accompanying documentation. Recommendation procedures are outlined in the annual distribution of information regarding tenure and promotion from the Provost’s office. It is college policy that faculty recommendations for promotion and letters of recommendation are privileged information and are to be handled as such. They are not to be shared with the candidate without an official Public Records Request. The Chair shall collate the results and forward them together with the faculty recommendation forms, documentation, and a confidential recommendation to the Dean in the format specified in the guidelines from the Provost’s office. The Dean presents promotion cases to the College Tenure and Promotion Committee.

The Dean considers the cumulative record, obtains input in writing from the urban campus vice chancellor, if applicable, and determines whether or not to forward to the Provost a positive recommendation and the documentation. If the decision is to not forward the documentation the faculty member will be given a written justification. In addition, the faculty member will be given a minimum of five working days to exercise the right to have the documentation forwarded to the Provost regardless of the Dean’s decision. Recommendations are reviewed by the Provost.
Promotion Guidelines for Career Track Faculty

Working Titles
College faculty in the Career Track will be assigned internally to one of four sub-tracks (research, clinical, scholarly, and teaching). This assignment and the accompanying individual workload allocation will guide annual and promotion reviews.

The WSU Faculty Manual also permits individual colleges to identify college-wide working titles for career track faculty. Following the Faculty Manual, it is the policy of the College of Arts and Sciences that the working title for faculty assigned to the research or clinical sub-tracks will be a title composed of the sub-track followed by the appropriate rank (ex. Research Assistant Professor, Clinical Associate Professor). The working title for faculty assigned to the scholarly or teaching sub-tracks will be a title composed of the individual rank followed by “Career Track” (e.g. “Assistant Professor, Career Track; Associate Professor, Career Track; Professor, Career Track). Individual or departmental substitutions and/or abbreviations of these working titles are not authorized by the Faculty Manual and thus should not be used. Working titles are to be used on any official form of communication such as, but not limited to, individual email signatures and departmental web pages and directories.

CRITERIA

Teaching Sub-Track
Faculty in the teaching sub-track have appointments that are primarily oriented toward teaching, with reduced expectations in service and limited or no expectations in research, scholarship, or creative activity. As such, promotion within this sub-track is determined largely by a continuing excellence in teaching.

General Statement on Excellence in Teaching
In considering a case for promotion in this sub-track, the College values most highly a demonstrated record of achievement and growth, one that demonstrates evolution and innovation in a faculty member’s teaching over time. The College also recognizes that teaching occurs in a variety of modes and environments outside of the formal classroom, individual or group lessons, studio, or lab settings. Work such as independent studies, mentoring and informal advising, and advancing student professional development, especially when it is accompanied by evidence of effectiveness, can thus also be an element of a promotion case in this sub-track.

Excellence in teaching should be presented and assessed through multiple measures and with an attention to the teaching that has occurred throughout a candidate’s time in rank. While high student evaluation scores are perhaps the most immediately accessible means of demonstrating excellence in teaching, such scores by themselves will not be determinative for promotion, nor will individual instances of lower teaching evaluations necessarily prevent promotion. Additional measures of teaching excellence may include peer evaluations, participation or leadership in program assessment and development, selection and development of teaching material (both proprietary and open education resources), effective engagement with larger unit and discipline efforts to advance pedagogy and curricula, internal and external awards, and presentation or publication of material regarding teaching in appropriate professional outlets. Two peer
evaluations of recent teaching (within the prior three years of an application) must be included in the candidate’s promotion materials.

*Promotion to Teaching Associate Professor*

Candidates for promotion to Teaching Associate Professor are expected in the first instance to demonstrate that their teaching effectively supports course and unit learning outcomes, and that it reflects the current state of knowledge and pedagogy in the discipline. Assignments in service or research, scholarship, and creative activity will be evaluated by the standards applied to the evaluation of secondary areas within the scholarly sub-track, with particular expectations conditioned by the faculty member’s contractual workload.

Regarding teaching, candidates for promotion to Teaching Associate Professor should demonstrate the capacity to effectively communicate course content to students, and their course and assignment designs should be accessible to all students. These designs should also support student success and, where appropriate, active learning. Where appropriate, candidates are expected to help develop these qualities in teaching assistants assigned to their supervision. For promotion to Teaching Associate, the College also particularly values the capacity and commitment for further development as a teacher, especially when these qualities build upon the pedagogical growth a faculty member has already pursued as a Teaching Assistant Professor. Versatility in the classroom, as shown either by teaching a range of classes or by pursuing new methods of teaching within regularly recurring set of courses, can also demonstrate that a faculty member continues to develop as a teacher. Such qualities help ensure the continuing level of excellence appropriate to a more senior position in this sub-track.

*Promotion to Teaching Professor*

Candidates for promotion to Teaching Professor are expected to demonstrate continuing effectiveness in the classroom, as well as elements of pedagogical growth and leadership beyond that which would characterize promotion to Teaching Associate Professor. Assignments in service or research, scholarship, and creative activity will be evaluated by the standards applied to the evaluation of secondary areas within the scholarly sub-track, with expectations conditioned by the faculty member’s contractual workload expectations.

Candidates for promotion to Teaching Professor should demonstrate not only sustained excellence in classroom teaching but also innovation and further growth in their pedagogy, course and assignment design, and efforts toward student success. The College recognizes that such efforts may expose the faculty member to lower student evaluation scores or unsuccessful moments of teaching. In assessing such instances, and growth in teaching more generally, the College will seek a pattern of iterative growth, one in which a faculty member extends their pedagogy, assesses the results of that change, and makes further adjustments based on those assessments.

Especially for promotion to Teaching Professor, the College also particularly values efforts and initiative toward supporting the growth of colleagues and graduate students (both within and outside the unit) as teachers, and work to enhance a unit’s curricula. Candidates seeking promotion to Teaching Professor are expected to take on active leadership roles in such activities within and/or outside their home unit. Such qualities reflect a concern with the larger dimensions of teaching appropriate to the highest teaching-centered rank within the College.
**Scholarly Sub-Track**

CAS Faculty in the scholarly sub-track generally have appointments that include both a primary allocation toward teaching and a significant allocation dedicated to one or more of the following areas: student advising, research or scholarship, creative activity, outreach, practice, educational leadership, administration, or academic service.

Given the resulting diversity of such appointments, and in particular the potential range of secondary duties, all promotion reviews for faculty in the scholarly sub-track should be informed in the first instance by the specific workload expectations detailed in the candidate’s contract. The College recognizes that the needs of a unit or the candidate’s professional development may result in changes in these assignments, especially in a candidate’s secondary area(s). Shifts in these areas will thus not necessarily be considered an impediment to a candidate’s promotion. In some cases, successful faculty members who have changes in secondary areas may need more time in their current rank in order to achieve the credentials necessary for promotion to the next rank.

**General Statement on Excellence in Teaching**

In considering the teaching presented for promotion in this sub-track, the College values most highly a demonstrated record of achievement and growth, one that demonstrates evolution and innovation in a faculty member’s teaching over time. The College also recognizes that teaching occurs in a variety of environments outside of the formal classroom, individual or group lessons, studio, or lab settings. Work such as independent studies, mentoring and informal advising, and advancing student professional development, especially when it is accompanied by evidence of effectiveness, can thus also be an element of a promotion case in this sub-track.

Excellence in teaching should be presented and assessed through multiple measures and with an attention to the teaching that has occurred throughout a candidate’s time in rank. While high student evaluation scores are perhaps the most immediately accessible means of demonstrating excellence in teaching, such scores by themselves will not be determinative for promotion, nor will individual instances of lower teaching evaluations necessarily prevent promotion. Additional measures of teaching excellence may include peer evaluations, participation or leadership in program assessment and development, selection and development of teaching material (both proprietary and open education resources), effective engagement with larger unit and discipline efforts to advance pedagogy and curricula, internal and external awards, and presentation or publication of material regarding teaching in appropriate professional outlets. Two peer evaluations of recent teaching (within the prior three years of an application) must be included in the candidate’s promotion materials.

**General Statement on Secondary Areas**

Given the potential range of secondary areas available to scholarly faculty, the College recognizes that the profiles and accomplishments of candidates for promotion in this sub-track may vary widely. Especially given this diversity, expectations for the type of work and its manner of production and dissemination will also likely vary by discipline and should be defined in part by the expectations of a candidate’s home department. For its part, the College holds that the quantity of work in any given area, while potentially significant, is by itself an insufficient criterion for promotion. Rather, the College expects that the following characteristics will inform the evaluation of candidate performance in any of the secondary areas identified above:
• **Growth:** within their secondary area(s) candidates should demonstrate increasing levels of accomplishment, responsibility, engagement, and/or leadership.

• **Coherence:** activities within secondary area(s) should contribute to candidates developing a particular expertise and a recognizable professional profile.

• **Impact:** activities within secondary area(s) should contribute to the advancement of a scholarly field; curricula, programs, or departments; colleges, campuses, or the university as a whole; individual students or student groups; initiatives in research, scholarship, or creative activity; opportunities for public engagement and policy influence; or other defined areas of work beyond individual professional development. Activity that has not secured specific outputs or results, such as scholarship “in progress” or new programs still in development, will be recognized but thus accorded lesser significance.

**Promotion to Scholarly Associate Professor**
While contractual expectations will inform any individual case for promotion to Scholarly Associate Professor, initial promotion within this career sub-track is most frequently determined by a continuing excellence in teaching and an emerging record of sustained accomplishment in the secondary area(s) relevant to the candidate’s appointment.

The teaching of candidates for promotion to Scholarly Associate Professor will be evaluated in adherence with the criteria established for promotion to Teaching Associate Professor (above), with particular attention being paid to the demonstration of effective communication, accessibility of the course and assignments, support for student success, and the capacity for further development as a teacher. Proportionate to contractual expectations, performance in the secondary area(s) is to be assessed using the criteria detailed above, with particular attention being paid to the qualities of coherence and growth. In terms of impact, candidates emphasizing work internal to WSU, such as advising or program development, should demonstrate an emerging reputation for individual excellence and engagement. Candidates emphasizing externally facing work, such as research/scholarship/creative activity or public engagement and policy efforts, should demonstrate an emerging regional or national reputation in these areas. Letters of support detailing this activity and its impact can be included among a candidate’s materials.

**Promotion to Scholarly Professor**
While contractual expectations will inform any individual case for promotion to Scholarly Professor, promotion to this rank is most frequently determined by a continuing excellence in teaching and a sustained record of accomplishment and leadership in the secondary area(s) relevant to the candidate’s appointment.

The teaching of candidates for promotion to Scholarly Professor will be evaluated in adherence with the criteria established for promotion to Teaching Professor. Candidates for promotion to Scholarly Professor who have teaching expectations are expected to demonstrate continuing effectiveness in the classroom, as well as elements of pedagogical growth and active leadership beyond that which would characterize an initial promotion. In particular, candidates should demonstrate qualities of exploration, innovation, and classroom or curricular versatility.

Proportionate to contractual expectations, performance in the secondary area(s) is to be assessed using the criteria detailed above, with particular attention at this level being paid not only to continuing potential for growth but also impactful leadership. Candidates emphasizing work internal to WSU, such as advising or program development, should demonstrate a capacity to
translate their individual efforts into work with broader positive impacts among colleagues, curricula, departments and programs, or the university as a whole. Candidates emphasizing externally impactful work, such as research/scholarship/creative activity or public engagement and policy efforts, should demonstrate an established regional, national, or international reputation in these areas. Together such qualities reflect a concern with the larger dimensions of accomplishment appropriate to this rank. Letters of support detailing this activity and its impact can be included among a candidate’s materials.

**Research Sub-Track**
CAS Faculty in the research sub-track generally have appointments that are predominantly or exclusively focused on research, scholarship, or creative activity. They may also serve as principal or co-principal investigators on grants or contracts administered by the university. Particular terms of these appointments, including salary, requirements for extramural funding, space, and start-up funds, will vary, and may include the expectation that faculty members to provide all or significant portions of their own salary through extramural funding.

As such, promotion reviews for faculty in the research sub-track should be informed in the first instance by the specific workload expectations detailed in the candidate’s contract. In general, however, the high level of research/scholarship/creative activity workload for faculty in this sub-track will be reflected in commensurately high expectations for productivity and impact in this area. Similarly, these faculty will have no significant teaching or service expectations unless those responsibilities are negotiated and commensurate funding support is provided. Where core research obligations involve the individual supervision and/or mentoring of undergraduate or graduate students, however, this work should also be evaluated in any promotion review.

**Promotion to Research Associate Professor**
While contractual expectations will inform any individual case for promotion to Research Associate Professor, initial promotion within this sub-track is most frequently determined by a candidate’s record of accomplishment and growth in the area of research, scholarship, and creative activity. Candidates who work collaboratively in labs, multi-person initiatives, or research or performance groups are also expected to contribute positively to the effectiveness of such groups.

The particular markers of such accomplishment will vary by discipline but will frequently include considerations of productivity in publication, creative performances, and exhibitions; significance of venues for such work; effectiveness in securing extramural funding; and the successful application of research to partnerships with industry, governmental agencies, and other public or private entities. In all cases, however, the candidate will be expected to demonstrate in such areas an emerging national or international reputation, as well as the capacity and likelihood for continued excellence. Where student supervision and mentoring are included in workload expectations, the candidate is expected to have demonstrated effective communication, support for student professional development, and adherence to departmental or unit expectations.

**Promotion to Research Professor**
While contractual expectations will inform any individual case for promotion to Research Associate Professor, promotion to this rank is most frequently determined by a record of
sustained accomplishment in the area of research, scholarship, and creative activity. In addition, candidates who work collaboratively in labs, multi-person initiatives, or research or performance groups are also expected not only to contribute positively to such groups but also take on informal or formal leadership roles that amplify the effectiveness of these groups.

The particular markers of such accomplishment will vary by discipline but will frequently include considerations of productivity in publication, creative performances, and exhibitions; significance of venues for such work; effectiveness in securing extramural funding; and the successful application of research to partnerships with industry, governmental agencies, and other public or private entities. In all cases, however, the candidate will be expected to demonstrate in such areas an established national or international reputation, as well as the capacity and likelihood for continued excellence. Where student supervision and mentoring are included in workload expectations, the candidate is expected to have demonstrated effective communication, support for student professional development, and adherence to departmental or unit expectations.

**Clinical Sub-Track**

CAS Faculty in the clinical sub-track generally have appointments in which the primary responsibility rests with clinical practice and/or the supervision and clinic-based instruction of professional students, interns, residents, and/or fellows. They may have secondary expectations in one or more of the following areas: research, scholarship, or creative activity; teaching (when distinct from clinic-based instruction); outreach; educational leadership; administration; or academic service.

Given the resulting diversity of such appointments, and in particular the potential range of secondary duties, all promotion reviews for faculty in the clinical sub-track should be informed in the first instance by the specific workload expectations detailed in the candidate’s contract. The College recognizes that the needs of a unit or the candidate’s professional development may result in changes in these assignments, especially in a candidate’s secondary area(s). Shifts in these areas will thus not necessarily be considered an impediment to a candidate’s promotion. In some cases, successful faculty members who have changes in secondary areas may need more time in their current rank in order to achieve the credentials necessary for promotion to the next rank.

**General Statement on Excellence in Clinical Practice and Clinical Instruction**

In considering the clinical practice, supervision, and instruction presented for promotion in this track, the College values most highly a demonstrated record of achievement and growth, one that demonstrates over time the evolution, innovation, and the expansion and extension of a faculty member’s knowledge and clinical practice. Of particular value is the extent to which a faculty member’s individual clinical practice and instruction contributes to the larger mission of the clinic, department, or unit. While the specific nature of this work will vary among clinics and appointments, the College emphasizes in each instance the importance of providing services and instruction that are ethical, evidence-based, and consistent with the best professional expectations of the discipline. The College also recognizes that clinical instruction can occur in a variety of environments outside of the formal classroom or clinic. Work such as independent studies, mentoring and informal advising, and advancing student professional development, especially when it is accompanied by evidence of effectiveness, can thus also be an element of a promotion case in this sub-track. Similarly, when appropriate, scholarship in this sub-track may also be focused on applied professional practice or teaching as well basic disciplinary research.
Excellence in clinical practice and instruction should be presented and assessed through multiple measures and with an attention to the work that has occurred throughout a candidate’s time in rank.

General Statement on Secondary Areas
Given the potential range of secondary areas available to clinical faculty, the College recognizes that the profiles and accomplishments of candidates for promotion in this sub-track may vary widely. Especially given this diversity, expectations for the type of work and the forms of its expression will also likely vary by discipline and should be defined in part by the expectations of a candidate’s home department. For its part, the College holds that the quantity of work in any given area, while potentially significant, is by itself an insufficient criterion for promotion. Rather, the College expects that the following characteristics will inform the evaluation of candidate performance in any of the secondary areas identified above:

- **Growth:** within their secondary area(s) candidates should demonstrate increasing levels of accomplishment, responsibility, engagement, and/or leadership.
- **Coherence:** activities within secondary area(s) should contribute to candidates developing a particular expertise and a recognizable professional profile.
- **Impact:** activities within secondary area(s) should contribute to the advancement of a scholarly field; curricula, programs, or departments; colleges, campuses, or the university as a whole; individual students or student groups; initiatives in research, scholarship, or creative activity; opportunities for public engagement and policy influence; or other defined areas of work beyond individual professional development. Activity that has not secured specific outputs or results, such as scholarship “in progress” or new programs still in development, will be recognized but thus accorded lesser significance.

Promotion to Clinical Associate Professor
While contractual expectations will inform any individual case for promotion to Clinical Associate Professor, initial promotion within this sub-track is most frequently determined by a continuing excellence in clinical practice and/or instruction and an emerging record of sustained accomplishment in the secondary area(s) relevant to the candidate’s appointment.

The clinical practice and instruction of candidates for promotion to Clinical Associate Professor will be evaluated in adherence with the criteria detailed above. In their clinical practice candidates are expected in the first instance to have provided consistently high-quality, evidence-based, and empathetic care to patients and/or clients. Particular attention will also be paid to the candidate’s ability to communicate clearly and effectively; the quality of participation in clinic programs and/or student instruction; and the capacity for further development as a clinician. When that work entails formal classroom-based instruction, it will be evaluated in accordance with the “General Statement on Excellence in Teaching” detailed elsewhere in this document. Proportionate to contractual expectations, performance in the secondary area(s) is to be assessed using the criteria detailed above, with particular attention being paid to the qualities of coherence and growth. In terms of impact, candidates emphasizing work internal to WSU, such as advising or support of services provided to the campus community, should demonstrate an emerging reputation for individual excellence and engagement. Candidates emphasizing externally facing work, such as research/scholarship/creative activity or the provision of external services or professional and educational outreach in clinically relevant areas, should demonstrate an
emerging regional or national reputation in these areas. Letters of support detailing this activity and its impact can be included among a candidate’s materials.

Promotion to Clinical Professor

While contractual expectations will inform any individual case for promotion to Clinical Professor, promotion to this rank is most frequently determined by a continuing excellence in clinical practice and/or instruction that is accompanied by a sustained record of accomplishment and leadership in the secondary area(s) relevant to the candidate’s appointment.

The clinical practice and instruction of candidates for promotion to Clinical Professor will be evaluated in adherence with the criteria detailed above. In particular candidates are expected to have extended their individual excellence in clinical practice and instruction to broader positive impacts on students, communities, the clinic(s) they serve. Where appropriate and available, candidates will also be expected to have pursued leadership roles in education, clinical program assessment and development, and/or community service programs that serve the mission of the clinic, the department and the university. In their primary role of clinical practice and instruction, candidates for promotion to Clinical Professor who have teaching expectations are expected to demonstrate continuing effectiveness, as well as elements of pedagogical growth and active leadership beyond that which would characterize an initial promotion. In particular, candidates should demonstrate qualities of exploration, innovation, and classroom or curricular versatility. When that work entails formal classroom-based instruction, it will be evaluated in accordance with the “General Statement on Excellence in Teaching” detailed elsewhere in this document.

Proportionate to contractual expectations, performance in the secondary area(s) is to be assessed using the criteria detailed above, with particular attention at this level being paid not only to continuing potential for growth but also impactful leadership. Candidates emphasizing work internal to WSU, such as advising or program development, should demonstrate a capacity to translate their individual efforts into work with broader positive impacts among colleagues, curricula, departments and programs, or the university as a whole. Candidates emphasizing externally impactful work, such as research/scholarship/creative activity or public engagement and policy efforts, should demonstrate an established regional, national, or international reputation in these areas. Together such qualities reflect a concern with the larger dimensions of accomplishment appropriate to this rank. Letters of support detailing this activity and its impact can be included among a candidate’s materials.

Procedure

Faculty members within the Career Track may be considered for promotion to Associate Professor within the appropriate sub-track after five years as an Assistant Professor within the Career Track. However, exceptional circumstances may alter this time period. Any early consideration must first be approved by the Dean and the Provost in the spring semester. If promotion to Associate Professor within the Career Track is not pursued or is not granted, faculty may remain at the rank of Assistant Professor within the appropriate sub-track provided satisfactory performance continues. Within the Career Track there is no limit on the number of times promotion to Associate Professor may be sought.

Faculty members within the Career Track may be considered for promotion to Professor within the appropriate sub-track after five years as an Associate Professor. However, exceptional
circumstances may alter this time period. Any early consideration must first be approved by the Dean and the Provost in the spring semester. If promotion to Professor within the Career Track is not pursued or is not granted, faculty may remain at the rank of Associate Professor within the appropriate sub-track provided satisfactory performance continues. Within the Career Track there is no limit on the number of times promotion to Professor may be sought.

It should be noted that time in rank is not sufficient by itself to be considered for any promotion within the Career Track.

For promotions within the Career Track the department conducts a comprehensive, tenure-style review. All files are uploaded to a SharePoint site as specified by the Office of the Provost. A notebook is submitted according to the normal promotional processes as outlined in the guidelines released by the Office of the Provost. The SharePoint site and the notebook contain the same information as the promotional file for a tenure-track or tenured faculty member. All candidates will be asked to provide a current vita; a signed teaching portfolio (5 pages maximum); teaching evaluations; and, as appropriate, supplemental material and statements documenting effort, accomplishments, and impact in the secondary area(s) defined in the candidate’s workload allocation.

All other elements of a promotion file should also be presented, including at least five supporting letters solicited by the Chair. Under no circumstances will a reviewer be paid or compensated in any way for reviewing the candidate’s file or writing a letter. These letters may be internal or external to WSU, but must be external to the department. Although letters external to WSU are optional, including one or more is highly recommended. Also included are the Chair’s summary, Dean’s summary, vice chancellor’s summary when appropriate, faculty recommendation forms, and, the candidate’s past annual reviews.

On cases in the Career Track that seek promotion to Associate Professor, all career track faculty at the Associate or Professor ranks submit recommendations, regardless of the sub-track of the recommender or candidate. Tenure-track Associate Professors and Professors also submit recommendations, again regardless of the sub-track of the candidate. On cases in the Career Track that seek promotion to Professor, all career track faculty at the Professor rank submit recommendations, regardless of the sub-track of the recommender or candidate. Tenure-track Professors also submit recommendations, again regardless of the sub-track of the candidate.

It is college policy that faculty recommendation forms for promotion and letters of recommendation are privileged information and are to be handled as such. They are not to be shared with the candidate without an official Public Records Request. The Chair shall collate the results and forward them together with the faculty recommendation forms, documentation, and a confidential recommendation to the Dean in the format specified in the guidelines from the Provost’s office. The Dean presents promotion cases to the College Tenure and Promotion Committee.

The Dean considers the cumulative record, obtains input in writing from the urban campus vice chancellor, if applicable, and determines whether or not to forward to the Provost a positive recommendation and the documentation. If the decision is to not forward the documentation the faculty member will be given a written justification. In addition, the faculty member will be given a minimum of five working days to exercise the right to have the documentation forwarded to the Provost regardless of the Dean’s decision. Recommendations are reviewed by the Provost.
Nonreappointment and Termination of Appointment

Please see the WSU Faculty Manual, Section V.F.
APPENDIX 1

COLLEGE OF ARTS AND SCIENCES TEACHING PORTFOLIO POLICY
(Effective March 2013)

In order to have uniformity, the teaching portfolio should be prepared according to the following guidelines.

For pre-tenure, instructor and Clinical rank faculty, a summary of student evaluations of teaching should be included in the appendix to the teaching portfolio for all courses. The synopsis should include the average “score” on the uniform college questions. Complete sets of student comments should be provided for two courses. For faculty members being considered for promotion to professor, summaries are only required for courses taught in the past four years.

At the time of 3rd year review or tenure and promotion, in the Chair’s summary, the Chair will provide an analysis of the “scores,” putting them in the context of the level of class taught, typical scores at that level, and any other explanatory notes that would aid others in their interpretation.

Syllabi from two courses must be submitted. Lecture notes or volumes of course materials should not be submitted. If both graduate and undergraduate courses have been taught, a syllabus from each level should be included. The syllabus should be appended to the tenure and promotion “Teaching Portfolio” tab on the SharePoint site. The body of the portfolio should not exceed five pages but the syllabi may be longer. Additional materials can be appended.

Departments will conduct peer evaluation of teaching according to policies developed in the departments. There will be at least two classroom visits by department faculty in the year of the third year review and the year before consideration for tenure and promotion. Departments may opt for annual peer review of teaching. A short description of the observations will be provided to the Chair, given to the faculty member observed, and included in the materials presented for review. The College strongly suggests that the faculty member’s mentoring committee observe instruction during the first year of appointment, so as to assist in rapid progress in instructional proficiency.
A. GOALS

In large part due to the way in which I was taught, my emphasis in teaching is on important concepts and principles. It is these that are at the forefront when I develop a syllabus, and the examples I draw upon are selected to ‘hammer the concepts home’. Bare facts are of little significance without a framework in which they can be embedded.

In addition, I seek to encourage a way of thinking that is problem-based. I make frequent use of phrases such as “imagine that . . .” and “what if . . .”. My goal is to make people think, to consider alternative solutions to particular problems. I stress the value of scientific research in testing alternatives, and provide access to actual research data where appropriate. I believe that fostering such abilities not only aids in understanding the specific material at-hand, but also facilitates a lifetime of learning.

The courses I teach are aimed at a variety of audiences, and it is sometimes difficult to maintain distinctions. For my UCORE course, I believe it’s appropriate to sacrifice depth for synthetic/integrative breadth. At the 400-level, I do just the opposite. Straddling the divides between (my discipline) majors and non-majors, and between undergraduates and graduate students, is a hard challenge. As my teaching evaluations show, I never please everyone!

My goal as a research advisor is to help my students develop the various skills needed to be competent and independent researchers. I am something of a ‘hands-off’ advisor, but always ready to provide advice, direction and encouragement. I prefer my students to conduct work that, although within my sphere of interest, can stand outside of my personal research program. I am far more concerned that my students ask ‘good’ questions than work on any particular narrow concept. This general philosophy applies to both graduate students and undergraduates working under my supervision (the latter requiring more attention, of course).

B. RESPONSIBILITIES
1. **COURSES RECENTLY & CURRENTLY TAUGHT**

My typical teaching load is (xx) courses per semester, although I occasionally add a graduate seminar. The following is a list of all courses I have taught at WSU:

Spring 2010: Course name and number, number of students

Fall 2010: Course name and number, number of students

Spring 2011: Course name and number, number of students

Etc.

2. **WORK WITH INDIVIDUAL UNDERGRADUATE STUDENTS**

Number and name of students and projects working on or completed under your supervision.

3. **WORK WITH INDIVIDUAL GRADUATE STUDENTS**

Number and name of students or committees with which you worked.

4. **SERVICE ON GRADUATE COMMITTEES**

Number, type and capacity served on: i.e.: Master’s committees, Ph.D. committees, preliminary exams, etc.

5. **UNDERGRADUATE ADVISING**

Number and type of advising. i.e. certified or non-certified majors.

6. **USE OF DISCIPLINARY RESEARCH, SCHOLARSHIP OR CREATIVE WORK IN TEACHING**

I think it is crucial to present students with actual research data whenever possible, and do not hesitate to present work I have conducted for scrutiny. More specifically, I attempt to include novel experiments or ideas drawn from within my own research program.
7. SERVICE ON INSTRUCTION-RELATED COMMITTEES

I served as a member of the Department of ___________ Subcommittee. List charge to the committee and the eventual outcome.

C. EVALUATIONS

1. STUDENT EVALUATIONS

Selected but representative quotes from student evaluation of all courses I have taught at WSU are included as Appendices _____. I have tried to be evenhanded in selecting this material, including both negative and positive evaluations.

2. SELF-EVALUATIONS

i. PRINCIPLES OF CONSERVATION (DEPT XXX)

As a UCORE course, Dept xxx is designed for non-biology majors. Nevertheless, the number of students majoring in biology/environmental science has grown steadily (about 50% in spring 1996). That these people find Dept xxx rather superficial or lacking in depth (as revealed in the evaluations) is no surprise. However, I am reluctant to change this course, as I feel an emphasis on synthetic breadth is appropriate.

Moves are afoot to revise Dept xxx’s syllabus, which will provide a greater opportunity for additional reading and discussion. This may increase the palatability of the course to biology majors, while retaining its appeal to non-majors.

ii. BIOLOGY OF AMPHIBIANS & REPTILES (DEPT YYY): taught once

Dobzhansky once said that “nothing in biology makes sense except in the light of evolution”. With this comment to the forefront when I received my own training, it is inevitable that it affects my teaching. I make no apologies for being unashamedly evolutionary and phylogenetic in my treatment of herp biology. I consider this to be the contemporary way in which the ‘-ologies’ should be taught.

I chose to focus on how herps have solved important biological problems, rather than on their systematics, and I think most people appreciated this focus (perhaps due to the very varied backgrounds of people who took Dept yyy). My most severe critic was a zoology grad student for whom systematics is THE big thing in evolutionary biology! I agree that I may have overly de-emphasized systematics and will provide greater balance in the future.

Many people criticized the lab associated with this course. In my attempt to move away from the traditional lab of gazing at pickled specimens and dissecting animals, I failed to devise a sufficient number of good alternative exercises. I intend to provide better labs when Dept yyy is taught again in fall 2012.

iii. BEHAVIORAL ECOLOGY (DEPT ZZZ): taught once
Dobzhansky’s comment holds true for behavioral ecology also. For this reason, I make no apologies for stressing evolutionary concepts, both general and specific. That I placed greater emphasis on ‘behavior’ than ‘ecology’ reflects my own expertise as well as the state of the field.

Comments that I had little understanding of the literature beyond the text are unfair. It is true that I could not provide detailed background information for every empirical example we discussed, but our taxonomic scope was very broad. One reason for the paper required in this course was to encourage people to explore areas that they found especially interesting and/or which I considered in lesser detail. Everyone wrote excellent papers.

Why did I emphasize the behavioral ecology of reproduction at the expense of other areas? To have covered more conceptual material would have been to sacrifice depth for breadth in a way that would not have been acceptable at the 400-level.

About 25% of students were undergraduates, and thus it was difficult to assume equivalent knowledge of basic behavioral, ecological and evolutionary principles. Without doubt, the undergraduates found this a difficult course, but they may have gained the most from it.

D. RESULTS: INSTRUCTIONAL MATERIALS

In the summer of 2012 I was awarded an instructional minigrant to develop a discussion-based supplement to my course *Principles of Conservation*. Considering current conservation issues from both pro and con perspectives, I wrote an accompanying text of over 30 pages in length (copies available on request). I intend to incorporate this into my course in the future.
A. Goals

In a world where our graduates will likely take on many different careers over the course of their lives, where science and technology play an ever more sophisticated role, and where human impacts on the Earth are significant, I believe it is of vital importance that we prepare our students with basic scientific knowledge, either to function as scientists, or to critically evaluate scientific evidence presented in daily life. Students need to understand the scientific method. Therefore, in both my undergraduate and graduate courses, I strive to create an environment within which:

- students discover key scientific concepts and gain confidence in solving scientific problems;
- students develop clear conceptual models for hypothesis testing and integrate interdisciplinary information collected into a holistic system picture;
- students are comfortable using appropriate technology.

These goals can be achieved by implementing problem-based labs, using research project assignments and bringing recent research into the classroom. Because education research shows that students learn by participating, students should be doing all aspects of science, including hypothesis development, hypothesis testing, data analysis and interpretation, and summarizing work in both oral presentations and written reports.

B. Responsibilities

Courses recently and currently taught  (list course name and number and number of students)

A summary of courses developed and taught.
Table 1. Courses taught

<table>
<thead>
<tr>
<th>Year/Semester</th>
<th>Course #:</th>
<th>Course Title</th>
<th>Credit Hours*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate courses and special projects:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993/Fall</td>
<td>Course #</td>
<td>name of course</td>
<td>1.5 (3 total)</td>
</tr>
<tr>
<td>1994/Spring</td>
<td>Course #</td>
<td>name of course</td>
<td>3</td>
</tr>
<tr>
<td>1994/Fall</td>
<td>Course #</td>
<td>name of course</td>
<td>1.5 (3 total)</td>
</tr>
</tbody>
</table>

*number of credits that I was or am responsible for is shown outside the parenthesis.

---

**Instructional innovation and use of disciplinary research in teaching**

**Undergraduate courses.** Research has shown that students learn by their own experiences. My philosophy in developing the new courses and in recreating the courses has been to create active labs in which the students learn by conducting and interpreting their own experiments, rather than by exclusively reading about and working with measurements that have previously been made by others.

With the agreement of my co-instructors, I have converted one credit of lecture to a lab credit. Thus far, I have taken the lead on lab development for the course.

At the present time, there are no lab manuals commercially available that present a program of active labs, such as are needed for effective education. In fact, there is only one commercially available lab manual. It has a number of limitations: different cases are used to illustrate each concept so that learning is fragmented; students are looking for the one correct text-book solution in a verification format rather than using a more valuable “discovery” approach; “hands-on” components are minimal; and perhaps most importantly, there is little room for the students to ask their own questions or create their own experiments. Therefore, we have begun to create our own field-focused problem-based program.

An instructional mini-grant has funded the initial instrumentation of the demonstration site. The _____ provides a location for developing and testing key concepts, and making observations of a natural system. Through the labs, students conduct a study of the system at the field site in stages over the course of the semester. Students collaborate to produce a significant summary report which integrates their knowledge. Thus, the students conduct a complete scientific study: they construct hypotheses about the system, make observations concerning the physics and chemistry of the system over the course of the semester, critically analyze and interpret the data that they collect, and work together with other class members to determine conclusions and create a formal scientific report. The report constitutes a significant (~20%) proportion of the course grade. An example student report is provided in the Appendix.
Consistent with current pedagogy, the goal is to create labs that use a “discovery” approach and emphasize critical thinking. Additionally, the labs are designed to develop communication and teamwork skills. Technological tools, including computing and analytical equipment, are used where appropriate and available.

**Graduate Course.** I feel that graduate courses should emphasize the recent literature as the primary source of information. Both interpretation and critical evaluation of the literature is encouraged through problem-solving assignments and guided class discussions. I also make a point of bringing current issues in the field to class. For example, the Washington Department of Ecology is currently considering changing the methodology by which soil clean-up criteria are established within the state. After the students had spent a few weeks developing a model of the mechanisms controlling the interactions between organic contaminants and soil/sediments, we discussed the advantages and limitations of employing our model in the regulatory framework. Discussions like these allow the students to work through practical applications of current scientific literature, and require critical evaluation of the literature in a supported environment. My service on the Washington Department of Ecology Science Advisory Board, for example, provides a connection for the class to the very real issues of groundwater and soil contamination.

*Educational proposal pending*

A proposal, to fund development of groundwater labs using technology currently unavailable to WSU students and to create multimedia labs, has been submitted to the National Science Foundation, Instrumentation and Laboratory Development, Leadership in Laboratory Development program (ILI-LLD).

*Work with individual students and advising*

I have been the major advisor for one Master’s student who has successfully completed his degree. Currently, I am the major advisor for two graduate students who are both making good progress on their research projects and are supported on RAs this semester. It is a high priority to gain research support for the students during part of their graduate career so that they can focus attention on their research.

I serve on the committees of a number of other graduate students from the Departments of _________ and _________________. I provided advice on course selection for all of the graduate students in (dept) during a professor’s sabbatical leave. Together with interested students, I have been creating an ad hoc group that meets approximately monthly. The group members include myself, 2 faculty, our graduate students and a few interested others.

I have involved several undergraduate students in my research through independent study projects (Table 1) and through paid research positions. Students are included on portions of projects that I or one of the graduate students are working on directly.

I always make a point of sharing the overall goals of the research and keep the students apprised of the progress so that the students understand the whole picture. These students are always encouraged to join the research group and to come on field trips with the graduate students. A few of the students have taken advantage of these opportunities.
For these students, I have provided advice about graduate school options. A student that is currently working in the lab for me and I have discussed what makes a “good” graduate experience - I try to provide the broader academic context based on my experiences at other institutions and to empower students with information about how the academic department functions.

D. Results

Instructional materials completed and in preparation

In collaboration with my colleagues at WSU, I have created the draft lab manual (Appendix). After next year’s offering of the course, we should be able to provide a well-organized manual for the students at the beginning of the course.

Additionally, my colleague, and I will be collaborating to create a publishable lab manual for wide distribution, as described in a letter of support provided for the NSF proposal (Appendix).

Student successes

Name of student was awarded a scholarship for his M.S. research from the urban chapter of the _______________________________________. A manuscript for publication from his M.S. research is nearly completed, and he contributed to a second manuscript which is currently in the review process.

E. Appendix

1. Course syllabus and lecture notes from name of course.

2. Course syllabus for name of course.

3. Syllabus for proposed course, name of course.

4. Selected sections of the lab manual under development for name of course.

5. Examples of the final team project produced for name of course.

6. Letters of evaluation from:

_________________________  ____________________  _________________