

Capstone Experiences

Departments and Programs

Africology

The advanced 106-565 qualitative and paper product experience is directly designed to assess the basic mission of the department. In addition, the survey helps to quantitatively examine differences between less experienced students and our senior students. Because we typically have a small pool of majors, we are able to discuss majors' advancement at our faculty meetings. This is done with an internal organizational mechanism where the departmental advisor has a committee that monitors the progress of majors and minors.

Anthropology

The department has no assessment tools limited exclusively to seniors. The capstone course can be taken by juniors who have completed all requirements toward the degree. We are trying to collect demographic data to see if this should be changed.

Architecture

The Department does not have a capstone design course at the senior level. Graduation is based on overall GPA and minimum allowable grades in the required and elective studios.

Art History

Our senior level assessment tool, a capstone requirement, consists of a choice either of an independent study or internship. Both options offer an opportunity for undergraduates to conduct advanced research and require mastery of skills set out in our goals. This option is relatively new in our program, and we have just begun using an evaluation form to be filled out by the supervisor of the project as an assessment tool.

Biological Sciences

The results from our senior exit surveys are used in evaluating the Biological Sciences curriculum, the sequencing of courses and the overall quality of our degree programs. In addition to these surveys, an annual solicitation letter to alumni often produce useful comments on our program from graduates who have been out for a number of years. Comments about how certain courses were helpful in their careers are most useful in maintaining a solid curriculum within the various areas of specialization within the department.

Chemistry

There are currently three majors offered in the Department of Chemistry and Biochemistry. These are the ACS approved Course in Chemistry, the Chemistry Major (with or without a Biochemistry option), and the Biochemistry major. Each of these has independent research as capstone experiences. Since, the objective measure of essentially every chemist is research productivity, it is thus appropriate that the department assess the capacity of our senior students in the laboratory. Students tend to choose to undertake research with professors whose research is most closely related with their own interests. These experiences lead to a significantly improved understanding of the scientific process and provide opportunities for faculty to better assess a student's abilities. This in turn leads to meaningful recommendation letters that assist the student's applications to employers and graduate programs. It is vital that this process be incentive based and that both the student and principle investigator benefit. Mutual benefit occurs when students achieve sufficient original data to present it either as a poster or lecture at a national or regional meeting or as a published research article.

Civil Engineering and Mechanics

The College of Engineering and Applied Science Curriculum Assessment Plan includes a juried evaluation of the capstone design projects. Senior (capstone) design projects represent the pinnacle of engineering education bringing together the knowledge gained throughout the curriculum to address real world engineering problems. Students must demonstrate their proficiencies in a variety of areas including the ability to apply mathematics, science and engineering knowledge to identify, formulate and solve engineering problems using modern techniques and tools while considering the impact of the solutions in a societal context, and demonstrating the ability to communicate their work effectively. The important place occupied by the capstone design course in the curriculum makes the evaluation of the projects and their presentations a critical aspect of the plan for assessing the program outcomes.

The assessment of senior design projects will have the following components:

I. Evaluation of the Projects by the Instructor

1. Careful evaluation of the written project report for

Technical content, including

- a clear statement of the problem
- the solution(s) including alternatives and analysis
- effective use of engineering techniques and tools
- economic and societal impacts of the proposed solutions
- recommendations

Written communication skills, including

- organization of the report
- readability
- language usage
- effective use of graphs/charts/tables

2. Evaluation of teamwork

3. Evaluation of any prototypes/working models

II. Evaluation of the presentation by faculty members

1. Oral communication skills

- Cognizance of audience's level
- Technical content appropriate for audience
- Clear enunciation
- Language usage
- Eye contact
- Flow
- Quality of visual aids

III. Professionalism

1. Participation by team members

2. Peer evaluation

- Evaluation of the presentation by students
- Evaluation of teamwork by members of the team

In addition, the Civil Engineering program asks its industrial mentors to participate in the evaluation of design projects. Mentors read and evaluate selected final reports and hear and evaluate all oral presentations.

The evaluation program for senior design was fully implemented for the first time in the spring semester, 2001.

Communication

Assessment currently occurs in the Capstone course, which is taken in the senior year. Intended outcomes include: 1) Message Production assessed through oral presentations, written presentation, and/or group participation. 2) Message Analysis assessed via student evaluations of message coherence, consequences (social, ethical, relational), reasoning, and message effectiveness. Assessment data will be evaluated for revisions needed in curriculum, especially in our core courses (Introduction to Interpersonal Communication, Public Speaking, and Business and Professional Communication) and methods courses (Critical Analysis and Quantitative Research Methods). (Not research)

Criminal Justice

The department does not use senior level assessment tools of the sort indicated in the question.

Curriculum and Instruction

Undergraduate and Post-baccalaureate certification students:

There are a number of examples of senior-level assessment tools that reflect accomplishments in the major. Two examples are:

1. The Final Semester Portfolio is a culmination of the portfolio process that has been used throughout the professional program sequence. The portfolio must reflect the core values and standards for the certification program. These are aligned with the Core values and standards for the School of Education, which align with the state teaching standards defined in state law, and with the national teaching standards defined in the National Board Teacher Certification process.

Portfolios are reviewed on an on-going basis throughout the semester of student teaching by the faculty team working in the student teaching block. This includes the student teaching seminar instructor(s), the university supervisor and the field site cooperating teacher. At the end of the semester, each student makes a formal portfolio presentation in front of their peers and the faculty teams.

2. A minimum of four structured observations using required program evaluation forms are conducted during each semester of student teaching. Some programs have more than one semester of student teaching. These observations, as well as, the on-going evaluation of the field site cooperating teacher will determine if the student will be recommended for licensure. The successful completion of the final clinical experience or capstone experience of student teaching is the most critical exit requirement for a student to complete the program. If they are unsuccessful in this culminating experience designed to bring together all that they have learned throughout the program, they will not be allowed to finish the program.
3. All students completing programs for teacher licensure after August 31, 2004, will be required to successfully pass a national exam, PRAXIS II, which is a test of teacher content knowledge. The version of the test is determined by the desired licensure area.

4. All students exiting teacher certification programs, whether undergraduate or post-baccalaureate must have a cumulative grade point average in the content major or minor of 2.75 and must have a cumulative grade point average in the professional courses of 2.75 in order to be cleared for graduation and license endorsement.

Dance

All professional achievements are the result of senior level activities in a rigorous program that exposes students to a wide-range of training. This training develops the individuality of each student and imparts the skills, discipline, and confidence to continue their study and to seek employment as performers, choreographers, teachers, and administrators.

The B.F.A. curriculum focuses on performance and choreography. Senior-level activities transform our students from being a part of a team (ensemble group) to being the leader of a team working on artistic projects. Mature authorship and authority over the personnel and the elements of self-producing original works for the stage is the goal.

B.F.A. students learn to interpret the choreography of other dancers and create their own choreography. The capstone experience is a performance project that is developed and completed by the student. Each project is recommended to be one that “encompasses the sum total of their skills, knowledge, and interests.” It is usually a year-long activity with proposals in the fall, rehearsals in fall and spring, performances in the spring, and narrative summaries of the experience at the end of the spring semester.

Students assume responsibility for the success or failure of their projects. The organizing, selecting of the cast and creative team (sound design, costume designer, film collaborator), scheduling, and sometimes even marketing becomes the responsibility of the senior student. Problems are solved as unexpected obstacles arise. Organizational skills, commitments, faith in oneself, passion, and creative vision are all tested. Students develop endurance, perseverance, patience, and maturity. The overall outcome is enhanced confidence and self-esteem, the evidence that ambitions can be realized, and the discovery that something can grow out of an imaginative impulse. Successful accomplishment in a leadership role is a transformative and lasting experience that empowers the student to step into the professional world as a knowledgeable member and leader of a team. Choreographic examples include:

Senior Activity: Sarah Price/1995

Self-produced a full evening of choreography.

Professional Outcome/B.F.A.

Award-winning, Artistic Director Danceworks Performance Co, Milwaukee; adjunct instructor for UWM.

Senior Activity: Dani Kuepper/1998

Choreographed and performed a solo work entitled “Mrs. Schultz”.

Professional Outcome/B.F.A.

Included in American College Dance Festival Gala performance, invited to perform at Kennedy Center; adjunct instructor for UWM.

Senior Activity: Megan McCusker/1997

Choreographed and performed an ensemble dance about baseball.

Professional Outcome/B.F.A.

Her choreography was purchased by a regional dance company; accepted to graduate school at Smith College; teaching in Milwaukee Public School system; adjunct instructor for UWM.

Senior Activity: Kelly Anderson/2002

Choreographed a work entitled 'LadyLike' which explored aspects of female beauty.

Professional Outcome/B.F.A.

Self-produced two acclaimed, independent dance concerts in Milwaukee; dances professionally with two local companies; relocating to New York City in 2004.

In the B.A. curriculum, the emphasis of the senior level activities is on dancing in community settings. In the K-12 certification track, the emphasis is on elementary and middle school student teaching. The goals of these two programs are similar. They seek to instill appreciation of and respect for a variety of disciplined movement forms while making movement experiences available to people in community and educational settings. A few examples of service learning projects/experiences and student teaching experiences at the senior level include the following:

Senior Activity of B.A. students

- Expressive movement education for disabled veterans
- Expressive movement education for foster children
- Introduce Irish step dancing into studio curriculum
- Creating hip-hop classes in high school settings
- Teaching martial arts for at-risk youth
- Taught Yoga in UWM School of Allied Health
- Authored teaching curriculum for students attending Milwaukee Ballet's "Giselle"

Professional Outcome/B.A.

- Acceptance into Graduate programs for Dance Movement Therapy
- Hired as adjunct instructor for UWM
- Achievement of K-12 certification and subsequent hiring in Milwaukee Public School System.
- Opened own fitness studio
- Finalist for Program Director job in a suburban performing arts center

Professional Outcomes/MFA

Roxanne Kess. Ms. Kess graduated in 2002. She is a long-time member and Assistant Artistic Director of the Ko-Thi Dance Company. Ms. Kess's accomplishments as dancer, choreographer, composer and education outreach coordinator for Ko-Thi are recognized locally and nationally. She has integrated her experience as a professional dancer with the training she received at UWM. Graduate study allowed her to continue to develop as a creative artist and provide her with the opportunity to search for post-secondary teaching positions. In addition to her responsibilities at Ko-Thi, Ms. Kess is currently an instructor of African Dance and Contemporary Dance History at Marquette University.

Allyson Green. Allyson Green (Jacob Javits Scholar) graduated in 2001. Ms. Green currently is an Associate Professor of Dance at the University of California, San Diego. Ms. Green has an impressive professional national and international resume as a performer and choreographer. Her work is regularly produced

Nina Haft. Nina Haft (Jacob Javits Scholar) graduated in May 2004. Ms. Haft is the artistic director of Nina Haft and Dancers, based in San Francisco. She is also an instructor at California State University, Hayward. In addition to the Javits award that supports her graduate study at UWM, she has received numerous choreographic grants in California.

Hetty King. Hetty King (Jacob Javits Scholar) graduated in 2002. Ms. King recently received an M.A. in Performance Studies from New York University. She is an active performer and choreographer in New York City and is completing a manuscript on the anatomical technique of the late Nancy Topf for publication.

Sima Belmar. Sima Belmar (Graduate School Fellowship) graduated in 2003. Ms. Belmar is a dance writer, teacher and performer based in the San Francisco Bay area since 1997. She has written for the San Francisco Bay Guardian and Dance Magazine. She has taught at Sonoma State University and San Francisco State University.

Educational Psychology

A “continuous or progressive portfolio” will be developed by all students in the School Psychology Program at UWM. The reason for using the portfolio evaluation strategy is that it will permit ongoing student information and feedback on the following: a) the impact of specific training material and course content on their professional development; b) the “match” between training needs/priorities identified by students and competencies achieved through courses and field experiences; and c) validation and transfer of program concepts to “best” practices in school psychology. The student evaluation package incorporates three types of measures: portfolios, competency checklists, and student yearly reports. This multifaceted, data-based system of student evaluation is designed to ensure sound integrity of the program goal and student outcomes. Because competency data on training school psychology personnel should be integral to the content and processes that correspond to core school psychology coursework, explicit progressive portfolio activities will be incorporated into these courses.

Progressive portfolio techniques will be used as the one of the methods of evaluating student competencies in the School Psychology Program at UWM. The portfolio is a self-selected collection of works that provide authentic demonstration of knowledge and competencies in school psychology.

Portfolio assessment was determined to be an appropriate evaluative approach for four reasons:

- a) portfolio assessment provides descriptively rich evaluative information that cannot be obtained with multiple-choice and other closed-type measures;
- b) portfolio assessment increases participants’ ability to become self-evaluators (e.g., understanding of what they need to believe and know to be effective school psychologists);
- c) portfolio assessment captures the processes by which students learn and problem solve; and
- d) portfolio assessment provides information for redefining the curriculum and guiding instruction.

Because the structure of portfolio assessment can be easily integrated with the content and design of the School Psychology Program at UWM, it permits ongoing and continuous evaluations. Hence, the feedback obtained through the portfolio assessment is used to examine student outcomes and competencies as well as to modify the training model so that it is responsive to student needs.

Individual portfolios will be initiated by students while they are enrolled in Professional and Historical Roles in School Psychology. The concept of the progressive portfolio will be introduced and discussed in this course. Other courses that will incorporate portfolio components include: School-age Assessment and Intervention, Early Childhood Assessment and Intervention, Personality Assessment, Cognitive-Behavioral Interventions, Consultation Strategies, Educational Practices and Alternative Assessment, Beginning and Advanced Practicum in School Psychology, and Internship in School Psychology. Several types of individual portfolio entries will be assembled by school psychology students, including reflective practice forms, psycho-educational reports, in-service activities, journals, and case-study projects. Instructors of these core courses will provide guidelines for developing your portfolio entries. Journals permit a mechanism for field-based students to “story-tell” about issues and situations regarding school psychology practices in general, and their own professional development in specific. Practicum students will also engage in case-study projects that require them to explore an idea, belief, or concept central to a particular aspect of assessment, consultation, or direct intervention. The portfolio would be a “meta-cognitive” document of the case analysis or problem solving.

Composite Portfolios will be used to aggregate information for demonstrating the student outcomes and competencies. When students are enrolled in Practicum, the portfolio is submitted to the Practicum Instructor. The Composite Portfolio is completed at the end of Internship in School Psychology. In addition to the above entries, students provide other exemplars of their learning and practice, such as a video tape showing a consultation session with a consultee from a practicum site or conducting an interview with an administrator of a practicum site regarding how the administrator views the practice of school psychology.

Practica and Internship Competencies

In School Psychology (Ed.S. and Ph.D.) competency checklists related to the knowledge and skills are targeted in specific core courses are used to determine the “match” between training priorities and achieved competencies by students. Competency checklists correspond to the substantive content contained in core school psychology courses. To ensure social validation of the competency checklists, the checklists were developed by surveying field-based practitioners on what they view as necessary skills and knowledge for achieving “best practices” in school psychology training. Competency checklists are completed by the student and verified by faculty or field-based supervisors to monitor students’ acquisition of knowledge and skills. Hence, the competency checklist provides concrete and ongoing documentation of student progress.

Electrical Engineering and Computer Science

The Accreditation Board for Engineering and Technology (ABET) accreditation requires every EE graduate to have capstone design experience with team work. Students make oral presentations and demonstrate their products before the faculty and engineers from the industry, and are graded by these people. This used to be the EE-355 course that has been revised effective spring ‘04 with a new course no. EE-595.

All our Computer Science seniors are required to complete software development projects in the course COMPSCI 536. These projects provide students with valuable training in software design and testing.

English

Currently, all English majors are expected to take a capstone course, which can either be a seminar or an internship. This past fall, the Department passed a requirement stating that all capstone courses and experiences must require a substantial research project of each student.

In the future, we would like to collect a random sample of student research papers written for capstone courses and assess them using the Department’s learning goals for all English majors as our rubric.

However, at present, we do not have the resources to do so even though several of our faculty members have extensive experience in writing assessment through our administration of the first-year writing program. Writing assessment, done properly, is expensive and labor intensive. The writing needs to be collected in a systematic manner, stored, and then assessed with trained readers. Further, rubrics need to be developed, tested, and refined.

For now, we plan to ask faculty members teaching capstone courses to assess the success of our undergraduate program based on the performance of students in their capstone class. We will also be distributing a paper survey to students in capstone courses. In that survey, we will ask them to assess the success of our undergraduate program based on the Department's goals for student learning.

Exceptional Education

The Teacher Education Programs require a portfolio that is compiled and evaluated using a rubric based on major benchmarks/proficiencies associated with the license area.

Film

All seniors take the six credit capstone course, Film 510, Senior Project. They present their culminating work at the end of the semester in a student-organized public exhibition that is well-attended. Students know that their senior project is the final production of their undergraduate studies in Film and, as such, they devote an increased amount of their time, energy, and other resources toward its successful completion. There is a good deal of friendly competition among the students, and each one works to make an excellent showing. The senior project is, at minimum, the third significant production that each B.F.A. student will have in their portfolio upon graduation. Their project from Film 221 and/or 222, junior project and senior project make up the core of each undergraduates portfolio. Most students also have three or more other projects created in their advanced production electives, Film 380, 420 and 460.

During the past three years, the department has placed increased emphasis on student opportunities and has sought support for creation of new work and submission of student work to local, regional, national festivals. Eastman Kodak Company has provided \$6,000 worth of product grants that have assisted students with their senior projects. The Chicago lab and post-production company, Astro/Filmworkers, has also contributed lab services to fourth year and graduate students. With support from the UWM Foundation, the department sponsored the submission of 18 projects, primarily from the juried Student Film & Video Festival, to the 2003 Wisconsin Film Festival, in Madison. Of the sixteen entries, eight were accepted by their external jury as examples of the best student work in the region. Student work was also accepted at the regional level of the Student Academy Awards and at the international NextFrame Film & Video Festival, which is sponsored by the University Film & Video Association.

Foreign Languages and Linguistics

Students may choose several methods for satisfying the capstone experience in FLL, depending on the particular program in which the major is being completed, including independent study courses, study abroad experiences and showing proficiency in a language. In the language programs in the department, students may satisfy the capstone by passing a national test in the language of study. One of the measures of competent linguistics majors is their ability to solve problems. More specifically, linguistics majors must be able to analyze a set of language data, define a problem, propose a solution to the problem, and argue for that solution over alternatives. One of the measures of assessment used in the linguistics program is students' success in solving problems.

French, Italian, and Comparative Literature

The three programs employ several kinds of assessment tools, which provide systems and materials for evaluating student progress toward and fulfillment of learning goals in the major. For instance, the capstone experience, for which students may opt to conduct a research project, a senior thesis, or an internship, ideally indicates the student's command of linguistic, historical, cultural, and critical concepts. More specifically, the French program requires all French majors to pass an exam that assesses proficiency in language and culture in order to graduate. Student performance on the exam provides a measure of learning outcomes and an opportunity to advise students about further coursework to be completed if needed. The Italian Program makes use of portfolios, including proficiency testing materials and samples of student work in the second, fourth, and sixth semesters of language study, as well as an exit survey. Comparative Literature completes an evaluation of each major's analytical and writing skills based upon papers completed in an advanced course. Thus, faculty can track and evaluate student progress, making adjustments to the plan of study, if needed.

Geography

As part of the continuing efforts of the Department of Geography to assess the success and performance of its major programs, each prospective graduating major student is asked to complete this questionnaire. Please answer the questions on this form with careful consideration. Your insights, taken in conjunction with those of your peers, constitute one of the most valuable sources of information that can be used to maintain and improve the quality of the Geography curriculum at UWM.

1. The Geography department at UWM requires that graduating seniors have a general understanding of Urban, Environmental, Cultural and Physical Geographical process. The survey revealed that graduating seniors felt they had a good general understanding of their focus, however 25 percent said all areas are too general. Some stated that there was a lack of general introductory courses for environmental, cultural and urban geography. Two surveys stated that there was a complete lack of cultural geography courses. Twenty-five percent also stated that B.S. requirements prevented students from taking introductory courses in the department. Other minor points were:
 - Too much focus on the United States
 - Desire to have the department develop a closer working relationship with the Urban Planning Department
 - That little distinction was made in course/class work between environmental and physical course

The increase in Geography faculty will make it possible for the Department to offer more introductory and advanced courses in the specialty areas. For example, Professor Heynen will be offering a new introductory course for the Environmental track beginning in the summer of 2003. Over the last two years, the Department has been reviewing and revamping its major tracks and will be implementing these changes in the fall of 2004. During the review process, faculty examined issues related to course offerings, major requirements, and overlap among courses.

2. Generally, everyone felt that the department was lacking courses in their fields, especially in cultural, environmental, and physical areas. Students had to go outside of the department to take courses to get a better understanding of their field. Most people in the urban field liked their courses and got a lot of information from them.

As mentioned above, the Geography tracks have been refined and more courses will be offered as faculty numbers increase.

3. The department intends that each geography student is connected to a personal advisor in their field of interest who advises them on their undergraduate requirements, internship and employment opportunities, and graduate school requirements. Students were asked to evaluate the department in this regard. Student responses were summarized as follows (percentage of students surveyed):

- a. Need more info on job and educational opportunities..... 33 percent
- b. Need more contact w/ advisors 27 percent
- c. Need more staff 22 percent
- d. Not effective in general 16 percent
- e. Advising doesn't kick in early enough..... 16 percent
- f. Feel misguided..... 11 percent
- g. All around good advising 11 percent
- h. Lack of field course instructors 11 percent
- j. Can't get in touch with advisor 0.5 percent

* All in all, students responded negatively to this question with the exception of one respondent.

Faculty will be discussing the issue of student advising in the fall of 2003. As for internship opportunities, Professor De Sousa will be identifying and advertising internship opportunities for Geography students starting in the fall. Both graduating and current students are asked to let Professor De Sousa know of any internship opportunities they become aware of.

4. The department seeks to ensure that each major has a functional understanding of various research methods and approaches. Students were asked to evaluate the department's effectiveness with regard to educating them on the following methods/approaches:

	VERY EFFECTIVE				NOT EFFECTIVE	
	1	2	3	4	5	n/a
Quantitative methods (statistics)	13.3%	13.3%	33.3%	26.7%	13.3%	0.0%
Field study methods	6.7%	20.0%	20.0%	0.0%	6.7%	46.7%
GIS and related technologies	0.0%	40.0%	53.3%	0.0%	0.0%	6.7%
Archival methods (archived documents and manuscripts)	0.0%	13.3%	33.3%	13.3 %	6.7%	33.35%
Survey methods (questionnaire design and interpretation)	13.3%	26.7%	40.0%	13.3%	6.7%	0.0%
The scientific method and testing	13.3%	26.7%	46.7%	6.7%	6.7%	6.7%
Advanced writing	6.7%	20.0%	33.3%	20.0%	6.7%	13.3%

Comments:

- 1) Need practical application of GIS and less dependence on book tutorials
- 2) Quality of education received depends on instructor
- 3) Course needed = GPS/ cartography/ more options for field study (work)/ programming

Two new faculty members specializing in GIS will be joining the Geography faculty in Fall 2003, which will allow us to expand our course offerings in this area. As for the other skills, faculty members will examine their course syllabi to enhance these components.

5. The department seeks to ensure that each major be exposed to internship experiences and outside speakers in the field. How do you evaluate your education within the Geography major in this regard?

Of the 14 people who completed this question, only one thought that exposure to internships and outside speakers was adequate. The rest of the students felt that they were poorly prepared for the real world because of a lack of such opportunities.

As mentioned, Professor De Sousa will be responsible for identifying internship opportunities beginning in Fall 2003. As for increasing the number of outside speakers, the Department does organize a weekly colloquium series where graduate students, department faculty and invited scholars present their research findings. Faculty will also try to bring more speakers into the classroom.

6. Responses to the question "How can the Geography major be improved?"
 - More interaction between the department and its students, individual advisors (meet once a year)
 - More information about Internships and help finding jobs
 - Classes taught by professors (not lecturers or TA's)
 - Partnership between Urban Planning and Urban Geography
 - More field courses should be offered during the semester
 - Professors need to be more accountable by use of periodic evaluations
 - Tutoring services made available
 - Regular e-mails to all geography majors about information regarding the major
7. Regarding the students overall assessment of their UWM experience within their major program, we garnered the following responses:
 - Students overall felt that there should be more emphasis on the tracks within the Department and more defined tracts. Urban Geographers wanted more interaction with the School of Urban Planning. Students also wanted more opportunities and connections with the profession with the Department's help.
 - Fieldwork was a major concern. There should be more opportunities for fieldwork. Specific tracks should have different types of fieldwork.
 - Students wanted more interaction with the faculty and more attention from advisors. Many students were not happy with their advisors in the Department. Students felt that some professors saw themselves more as researchers than teachers, but students did appreciate local research being tied into the lectures.
 - The students felt that more classes needed to be offered to give students more choices.

As mentioned, all Geography major tracks have been refined and changes will be implemented in Fall 2004. Interactions with the Urban Planning Department have also been increasing over the last few years e.g., Geography 880 jointly offered by Geography and Planning, and the recent establishment of the Center for Advanced Spatial Information Research). The fieldwork issue will be considered, although some attempts have already been made to increase opportunities, such as Professor De Sousa's study abroad course to Toronto and Professor Heynen's course being developed for Guatemala. The Department will consider these recommendations in more detail during Fall 2003.

Geosciences

As these have just been initiated, we are unable to comment on the effects. In the past we have surveyed our alumni and used their input to improve our undergraduate and graduate programs.

Health Sciences

Capstone Experience

Senior CLS undergraduate students are required to write up and present case studies in each content area of the CLS curriculum (seven cases) to demonstrate competency to peers and CLS faculty.

Poster and Student Bowl Competition

Senior CLS undergraduate students compete in state-wide student poster and trivial pursuit style Student Bowl Competition each year at the state professional society meeting against other CLS students from across the state.

Results on National Certification Examination(s)

The scores of the senior students taking national certification examinations are used to monitor program content and effectiveness. Results are reviewed by the university program officials and the clinical affiliate sites and changes made to the curriculum content, if required.

A summary of the American Society of Clinical Pathologists (ASCP) certification exam results for the Medical Technology students over the last five years:

Year	UWM Pass Rate	National Average
2003	100%	81%
2002	91%	75%
2001	100%	80%
2000	93%	76%
1999	93%	75%

History

We assess majors and the major through our senior research seminar, our capstone course.

Human Movement Sciences

Students in three of the four sub-majors are required to complete a senior internship experience. This internship is a capstone experience in that the student is placed in an agency which has expectations of appropriate academic preparation. The internship experience provides the students with the opportunity to apply all acquired knowledge, refine problem-solving skills, and utilize critical thinking to develop appropriate strategies for a given situation. In addition, within the internship, most students prepare a “professional portfolio” which includes two major projects conducted by the intern during the semester. The internship experience frequently results in employment opportunities upon graduation.

Industrial and Manufacturing Engineering

All our seniors are required to take a capstone design course which involves working on a project from industry, providing a solution under real world constraints, preparing a final report, and making a final oral presentation.

Journalism and Mass Communication

As a result of our revision of our mission statement, the Department’s Curriculum Committee is currently revisiting the purpose of our capstone course, JMC 661 (Seminar in Mass Communication and Society). The committee is expected to make its recommendation to the faculty during spring semester 2004. As it currently stands, JMC 661 is limited to 15 students to place an emphasis on writing and research. In the past, there has been no formal assessment of student learning in this class. However, based on the competencies identified in our new mission statement, the department intends to begin that formal assessment in fall 2004.

Materials Engineering

The Materials Department offers a Senior Design Capstone course (590-390) where students work to solve a Materials Engineering related problem that impacts the local/regional industry. Students work individually and as teams in addressing and solving the various components of this industrial project. Through a series of meetings and seminars students present their outcomes and give a written report of the outcomes. A series of evaluations by periodic meetings some of them with people from industry and faculty are used to evaluate the student performance.

Mathematical Sciences

We are currently developing an undergraduate/graduate Assessment Program. The program focuses on our undergraduate and graduate majors along with our overall undergraduate program. During the 2002-2003 academic year the department updated its Mission Statement, Educational Goals for all Mathematical Sciences Majors, Additional Area Specific Goals, Educational Goals for Mathematical Sciences Minors, Educational Goals for non-majors, and created an Exit Questionnaire for our undergraduate majors. A trial run of the Exit Questionnaire was done at the end of the Spring 03 semester. The sample size was not sufficient to make any conclusions. We are currently working to identify and develop measurable objectives for the goals.

Music

The following are senior-level assessment tools used by the music department to demonstrate accomplishment in the major:

I. Jury Activities (string, woodwind, brass, keyboard, voice, composition)

All students enrolled in performance and composition studios are required to participate in juries at the completion of each semester. Comments from faculty and staff jurors are shared with students at the beginning of the next semester's lessons. In some areas, a percentage (usually 10 percent) of the students' studio grade comes from performance juries.

II. Portfolio Requirement

The Wisconsin Department of Public Instruction mandates (through its PI 34 requirement) that students in music education compile a teaching portfolio for demonstrating proficiency in their area of expertise. The portfolio is compiled as a part of major music methods and field experience requirements. Evidence of teaching proficiency must include:

1. A record of PPST passing scores.
2. A transcript demonstrating a 2.75 GPA.
3. A copy of current resume.
4. Lesson plans written and taught in music methods courses and student teaching.
5. A statement of teaching and learning philosophy.
6. Examples of audio and video recordings from student performances as a conductor or performer.
7. Written evaluations from cooperating teachers, university supervising teachers, and methods class instructors.
8. Self-evaluations based upon microteaching and student teaching experiences.

III. Undergraduate Senior-Level Assessments

A. Senior recitals (performance, composition) — All performance and composition majors have a final recital that serves as a capstone evaluation of their entire program at UWM. Recitals are evaluated by a panel of music faculty and staff members. A large portion of the recital is performed for the panel four weeks before the actual performance occurs.

B. Music Education Teacher License Results — UWM music education students must demonstrate competence in their teaching abilities before achieving Wisconsin teacher certification. This competence is demonstrated through a teaching portfolio consisting of a record of PPST passing scores; a transcript demonstrating a 2.75 GPA; a copy of current resume; lesson plans written and taught in music methods courses and student teaching; a statement of teaching and learning philosophy; examples of audio and video recordings from student performances as a conductor or performer; written evaluations from cooperating teachers, university supervising teachers, and methods class instructors; and self-evaluations based upon microteaching and student teaching experiences.

C. Praxis I and II Exam Results — Music education faculty will begin comparing UWM student scores on Praxis I and II exams with national and state peers. This information will be examined to help determine adjustments in core music courses and in the music education curriculum.

D. Musicology Final Theses — Students graduating with a degree in Musicology may complete an undergraduate thesis as a capstone project for their program. This project is designed to demonstrate the research and writing abilities of students in the program.

E. Pre-Music Teacher Certification Requirements and Certification Program Entrance Requirements— Following admission to the Music Education Program, and successfully completing the specified Music Education course of studies, a student seeking recommendation for teacher certification must successfully fulfill the following requirements:

1. Fulfill all degree requirements.
2. Successfully complete student teaching.
3. Compile at least a 2.75 cumulative GPA.
4. Fulfill the Field Experience Requirement.
5. Pass the Pre-Professional Skills Test (PPST).
6. Pass the Praxis II Music Content Exam.
7. Demonstrate teaching competency in their area of expertise through the use of a teaching portfolio.
8. Show personal qualities giving promise of success as a teacher of music and as a leader in music activities.

Nursing

Students are required to assess their cumulative nursing knowledge base twice during their last year in the nursing major. The first evaluation, done at the beginning of the senior year, assists students in recognizing weaknesses in their nursing knowledge base, providing guidance in strengthening those areas during the course of the senior year. Immediately prior to graduation, students again complete a comprehensive assessment to identify strengths and knowledge deficits in specific content that reflect the professional licensing exam for nursing practice.

The definitive measure of academic accomplishment for baccalaureate graduates of the College of Nursing is the successful passage of the National Council Licensure Examination (NCLEX) on the first attempt. Passing the NCLEX is the final step in the nurse licensure process, insuring that entry-level Registered Nurses have the necessary level of knowledge, skills, and abilities to engage in safe and effective patient care. The College of Nursing has consistently matched or exceeded the national average percent passing of candidates taking the NCLEX for the first time. For the year 2003, the College of Nursing percent passing rate for first time candidates was 84 percent compared to the national percent passing rate of 82 percent.

Philosophy

Our major is aimed at students who wish to use philosophy as the organization core of a liberal education, as a supplement enhancing the value of work in other fields, or as a solid foundation for graduate studies.

Departmental Goals for Philosophy Majors

1. Familiarity with majors figures and issues in the history of Western Philosophy, both ancient and modern (beginning with the Pre-Socratics, Plato and Aristotle and running through Kant).
2. Proficiency in critical reasoning and familiarity with formal languages and logic (including the propositional and predicate calculi).
3. Knowledge of historical and contemporary developments in moral philosophy, which includes social and political philosophy.
4. Understanding of some of the major issues in metaphysics and epistemology, which include the philosophy of mind and the philosophy of science.
5. Ability to define and pursue a research project and write an historically-informed, well-argued paper on a contemporary problem, a particular philosophy, or a philosophic movement.

Assessing Student Progress Toward Departmental Goals

1. For Goal 1, successful completion of 430 and 432, or equivalents.
2. For Goal 2, successful completion of 211, or equivalent.
3. For Goal 3, successful completion of at least one of the following: 341, 349, 355.
4. For Goal 4, successful completion of at least one of the following: 303, 317, 351, 324.
5. For Goal 5, successful completion of capstone course (681 or 685) or approved substitute.*

[*Instructor to submit an assessment of student s overall philosophy ability and maturity as evidenced in the capstone.]

Overall Evaluation of Philosophy Major

1. During a student's last semester, the Undergraduate Advisor will arrange an exit interview in which information on the following will be solicited:
 - a. The appropriateness of goals for majors 1–5.
 - b. How well the successful completion of the major requirements insure meeting goals 1–5.
 - c. Adequacy of department guidance.
 - d. Range if course offerings and course availability.
 - e. Other suggestions for improving the major program and experience.
 - f. Post-graduation plans and where undergraduate education in philosophy may fit into those plans.

2. The Undergraduate Advisor will assemble a portfolio for each graduating student. The portfolio will include:
 - (i) a transcript, (ii) research paper submitted for capstone, (iii) capstone instructor's report on the student, (iv) any documentation of special achievements (e.g. awards, recognitions, recognitions, letters, ect.), and (v) results of the exit interview.
3. At a Fall department meeting the Undergraduate Advisor will review each student's portfolio and lead a discussion of the student's records and accomplishments. At this meeting the department will explore any implications this review of graduating majors may have for departmental policies, offerings, teaching, etc.
4. Based on the findings of the Fall review and other relevant data, the Curriculum Committee will prepare for consideration during the Spring semester a report dealing with the following:
 - a. Is the department meeting its present goals?
 - b. How might the department improve its performance relative to present goals?
 - c. Should the goals themselves be changed? (Additions, omissions, specific modifications to particular goals?)
 - d. If the goals are changed, what if nay changes are needed in requirements, curriculum, policies, etc.?

Physics

Instructors of advanced laboratory courses will be surveyed annually to gain subjective impressions on how well students have achieved a broad knowledge of physics, how well they are able to analyze problems, and how much they have been exposed to vital (if routine) tasks expected of a professional scientist.

The performance of students on questions taken from recent Graduate Record Examinations (GREs) will be monitored by the Department to judge the efficacy of the physics undergraduate program in raising students to nationally expected levels of knowledge and competence for a physics bachelor's degree.

The performance of students in their required oral presentation in the Department's capstone course will be monitored to judge the student's skills of communicating ideas and results of physics research.

Political Science

We are using the results of the student papers used for the Capstone course to assess students' writing and research abilities. It is our intention to introduce more rigorous writing assignments in undergraduate courses.

Psychology

In the past, student behavior was assessed using a 60-item multiple choice examination that was developed to assess graduating senior's knowledge of psychology. All graduating majors enrolled in advanced laboratory courses completed the exam. The examination assessed knowledge of the major content areas of psychology.

Students were tested on their familiarity with major theories of psychology, understanding of the biological bases of behavior, knowledge of the scientific method including ethics, and knowledge of descriptive and inferential statistics. Scores of the undergraduates were then compared with those of three samples

(beginning psychology majors, psychology minors, and non-psychology majors) drawn from one of the Department's introductory psychology courses. This procedure allowed an assessment of the extent to which completion of the undergraduate program of studies in psychology produced an understanding of behavior beyond an introductory survey of the field. Outcome data consistently indicated that graduating seniors' total score and sub-scores (major content areas, major theories, biological bases of behavior, the scientific method, and statistics) were at least twice as high as those in the comparison groups. Because the outcome data for the examination did not prove valuable as a resource for improving teaching and learning, we abandoned this component and focused instead on students' abilities to design and conduct research, analyze data, reach data-based conclusions, and write a formal research report.

Thus, to assess creativity, critical thinking skills, proficiency in descriptive and inferential statistics and, in particular, the ability to summarize and interpret scientific data, the Department examines graduating seniors' grades on their final laboratory research report(s). This assessment yields an indication of graduating seniors' creativity, critical thinking skills, proficiency in conducting research, analyzing data, ability to form data-based conclusions, and in writing research reports. Outcome data shows that the vast majority of graduating seniors have a comprehensive understanding of research design, experimental methodology, and statistics. The research reports also show that the vast majority of students have well-developed critical thinking skills, can creatively approach problems, and apply what they have learned in writing scientific reports.

School of Information Studies (SOIS)

The BSIR senior capstone allows students to integrate and apply what they have learned in prior courses to the development and evaluation of an information product or service. Projects undertaken by students in the senior capstone have benefited the SOIS and UWM community, by providing information systems and services that have been implemented on campus (e.g., SOIS Web page and student database, Center for International Education LAN configuration).

School of Business

All students pursuing an undergraduate degree in business administration are required to complete a capstone course—Bus Adm 550 Management Analysis. This course provides an opportunity for students to integrate the different skills and concepts acquired from the various Business School courses in studying and analyzing issues associated with strategic decision-making and the organization as a whole. It allows students to augment their functional skills (e.g., accounting, marketing, finance, etc.) with a strategic management perspective and to apply them to the study of business problems faced by senior managers. The overall objective is to familiarize students with strategic thinking in complex business situations, and more specifically to learn concepts, models and theories that can be used to identify, analyze, and solve strategic issues, to practice strategic decision-making through specific case analyses, and to communicate ideas through class discussions, report writing and group projects and presentations.

An integrating course is also required in the M.B.A. curriculum Bus Adm 712 Strategic Management. This course is about general management and differs from functional area business courses, such as accounting or marketing, because students are required to use diverse knowledge and skills. The course focuses on helping students integrate knowledge from previous MBA coursework; increase their knowledge of strategic issues and analysis; and improve their ability to work with and through people—a key skill for general managers. The objectives for our course include:

1. Developing a general management orientation, including the ability to analyze broad, organization-wide problems.

2. Integrating the business skills already developed and knowledge obtained in other coursework.
3. Developing an awareness of the literature of strategy formulation and implementation, and how it applies to contemporary organizations.
4. Improving skills in problem solving, working with and through people, and oral and written communication.

School of Continuing Education

In general, the non-credit learning in the School of Continuing Education doesn't have precisely comparable assessment tools, although individual programs in the School are regularly assessed by outside regulators to assure competencies in specific areas.

For example, within the Center for Consumer Affairs, training of Ford warranty arbitrators is annually audited by independent auditors for compliance with both national (Federal Trade Commission) standards and state standards (from Arkansas, California, Ohio, and Wisconsin) regarding the sufficiency of training for arbitrators. These audits have consistently found compliance with such standards as measured by the learning outcomes inherent in the regulatory standards. The results of these audits are routinely incorporated into ongoing training efforts.

In like manner, the effectiveness of the education provided to auto dealership and advertising agency personnel charged with implementing advertising is indirectly but quite effectively reflected by the extent of compliance by such personnel with various applicable legal standards. Were compliance not achieved, the State agencies to which non-complying advertisements are ultimately referred would immediately see non-effectiveness in the form of increased numbers of complaints and problematic advertisements.

Social Work

For undergraduates, we have neither a capstone course nor any specific senior-level assessment tool. However, the experience that best demonstrates their potential as a professional social worker occurs in their field work experience.

Sociology

Sociology's assessment of the undergraduate major is focused on the capstone seminar (Sociology 493). Surveys are administered to participants asking question about the major, career preparation, etc. The capstone research project is also evaluated in a systematic way in terms of clearly articulated expected outcomes.

Spanish and Portuguese

All majors are required to take an exit exam that evaluates their oral and written proficiency in Spanish. The results of these exams are sent to students, and have also been collected and analyzed over the past three years in order to establish norms for our majors and determine where we need to strengthen our program.

In addition to the exit exam, students complete a survey that provides feedback to the department on the strengths and weaknesses of our program, from the student perspective. Up to this point, the questions have been open-ended, but we are planning on developing a more objective questionnaire that will allow us to tabulate and analyze results and make curricular decisions based on this input.

Finally, all majors are required to complete a capstone experience, which is a research paper that expands upon the coursework that they have taken within the department. The purpose of the capstone experience is to assess students' ability to do independent research, and each student works individually with a specific professor to complete this project.

Theatre

PTTP PROGRAM SENIOR LEVEL ASSESSMENTS

Production and Management Portfolio Review

In the B.F.A. program senior-level assessment is accomplished through portfolio development and review. Portfolios demonstrate successful completion of project-based learning challenges of technological competencies, successful completion of independent arts-based research and production projects (for advanced and graduate students) Professionals from outside the school are brought in to evaluate the work, conduct interviews, and provide evaluation on professional standards.

Assignment of Managerial Positions

Assignments are made within each of the production areas (sound, lights, costumes props scenery, stage management). The delegation of these roles to students represents the equivalent of a senior project or thesis. Within these professional assignments, students are consistently evaluated for leadership skills, professional competencies, and creativity of approach. Students are assessed through journals, project development plans, and resultant outcomes. Ultimately, students must show expertise in their ability to manage time, budget, create work schedules, implement activity, and provide support for guest artists.

B.A. PROGRAM SENIOR LEVEL ASSESSMENTS

Casting

Interested students participate in an audition process for all departmental production-based courses and performances. Student success within this process is a significant indicator of an individual's ability to apply course content. It is also indicative of students developing expertise within the major. This process provides critical assessment of ability by the method employed throughout the profession student work is evaluated through conferencing, observation of applied theory, and professional rating scales.

K-12 Theatre Education Program

The TEP assesses senior and upper level students learning outcomes and program goals using the following data: Student GPA and achievement scores from the Theatre Content Area Skills Test (PRAXIS II), which is administered by ETS and the State of Wisconsin. Arts-based protocols and projects; alignment of curricula with best practices, National Standards for Teaching Theatre, UWM Urban Education Principles, and Wisconsin Teaching Standards; as well as a three phase evaluation of student's developmental and professional portfolio (including curriculum and lesson plans) are also implemented during students fieldwork and practicum. At the time of student teaching (the last semester before graduation) a three phase survey/questionnaire of students; questionnaire/survey of field supervisors; evaluation (through the use of rubrics and survey tools) of technology infused projects; onsite observations by outside evaluators, cooperating teachers, and university faculty; professional competency rating scale; and field notes and student journal entries archived electronically through computer mediated technologies are also used to evaluate students ability to enter the teaching profession. After successful completion of all assessment tools at a proficient level or above, and after successfully completing student teaching duties, individuals are granted a license to teach theatre K-12 in the State of Wisconsin.

New Initiatives**B.F.A. in Acting and B.F.A. in Arts Management**

These programs are currently in development, representing two new tracks. Establishment of these programs will create a greater range of students in the B.F.A./M.F.A. programs. Evaluation and assessment points include: 1) Admission is based on a high GPA as well as junior/senior level standing within the major, successful audition/portfolio review, written evaluation of work: 2) On admission to the program all students must maintain a high GPA and are assessed developmentally through a critical skills assessment procedures and demonstrated successful participation in departmental performance activities.

Visual Arts

Senior assessment tools are in place in the B.F.A. with teacher certification program. The student teaching and teaching portfolio requirements have been consistent vehicles for determining appropriate job placement after graduation. Regular surveys to ascertain placement levels per graduation class from the certification program have not yet taken place. Visual Art's certification graduates have a high job placement rate. They make up a significant percentage of metropolitan Milwaukee's art education teachers and administrators or go on to teach successfully in other states.

The intended capstone program changes are a vehicle for providing graduating undergraduate students with transitional skills for establishing their studio careers or continuing their education. More specified and diverse goals will be articulated during the program change and approval discussions.