

Western Carolina University, Undergraduate Construction Management Program Public Information

Strategic Plan (Updated, September 2013):

Our Mission:

To employ a construction industry focus to improve lives by educating students to be industry-ready leaders and by providing thought leadership to enhance industry, economic and community development through academic programs, educational outreach, and research.

Our Vision:

To be a national model for construction industry education and research.

Our Core Values and Guiding Principles:

- Excellence in scholarship, teaching, and learning
- Passion for organizational effectiveness
- Focus on sustainable organizational models
- Responsible stewardship of resources
- Free and open exchange of ideas
- Environmental sustainability
- Collaboration with and respect for our communities
- Cultural diversity and equal opportunity.

Our Goals:

- To provide continually improving and advancing curricula that prepare students to be leaders in the construction industry
- To support close student participation with the construction industry through opportunities such as student organizations, community outreach, student competitions, and internships
- To provide service and outreach to the construction industry at the local, regional, and national levels
- To provide faculty opportunities for continued professional growth.

Initiatives:

1. Maintain and gradually increase admissions standards.
2. Maintain and gradually increase graduation standards.
3. Continue to strengthen curricula of all programs.
4. Develop a BSE specialty that aligns with the current CM major.
5. Develop a resident construction management graduate program.
6. Support collaboration in research, teaching and service within the department and across all units of the Kimmel School.

7. Work to schedule and assign faculty workloads so that there is more flexibility for faculty members to undertake new initiatives.
8. Enhance and deliver support for externally funded grants, including development opportunities related to effective writing and successful grant applications.
9. Make better use of students' laptops to extend learning opportunities.
10. Enhance available research equipment and instrumentation.
11. Examine ways to reconfigure existing space to better accommodate emerging needs.
12. Continue to develop and extend articulation agreements with community colleges.
13. Collaborate with community colleges in recruiting students into construction-related programs that align with the construction management program at WCU.
14. Strengthen the Construction Management Industry Advisory Committee.
15. Engage industry partners and advisory committee members in classroom activities.
16. Refine the process for managing capstone projects to support increasing numbers of students.
17. Establish strategic relationships with Industry partners to increase unrestricted gifts and donated equipment for classrooms and labs.
18. Encourage and support faculty in bringing international scholars to our campus.
19. Continue to encourage faculty to bring faculty from other institutions to campus to deliver addresses and exchange ideas.

Admissions:

Admission to the undergraduate Construction Management program is based upon the same requirements as admission to Western Carolina University. For complete guidelines, and to apply, you can find the necessary links here:

<http://www.wcu.edu/admissions/index.asp>

Admissions standards and procedures are summarized below:

Admission Standards and Procedures:

The university is open to all qualified students without regard to race, sex, color, national origin, religion, age, sexual orientation, or disability.

First-Year Students. Admission to Western Carolina University and placement into courses and programs are based upon a variety of factors including courses taken, rank in class, SAT or ACT scores, and grade point average. The university reserves the right to require any conditions deemed necessary to help ensure success. Applications also are considered for admission from prospective students who have

achieved high school graduation equivalency by means of tests of General Education Development (GED).

Entrance Examinations. Freshman applicants must take the SAT or the American College Test (ACT). The achievement test in subject-matter fields is not required. For the SAT, application forms and information concerning the test fee, dates, and centers may be obtained from the College Board, P.O. Box 592, Princeton, New Jersey 08541. Information and application for the ACT may be obtained from The American College Test National Office, P.O. Box 168, Iowa City, Iowa 52243, and from high school guidance counselors. Students who elect to take only the ACT must take The Writing Test. Applicants must request that their scores be sent to the Office of Admission, Western Carolina University, Cullowhee, North Carolina 28723. College code for the SAT is 5897 and the ACT code is 3172.

Secondary School Preparation. The quality and content of the applicant's high school program are important. A good background in English, mathematics, foreign language, social studies, and natural sciences is required.

Standard Admission. Each applicant is evaluated on the basis of individual strengths and weaknesses for placement into the regular course sequence. Priority is given to those applicants who have demonstrated a strong potential for success in the academic programs at WCU. Factors that are used in the evaluation process include the following:

- Courses selected by the student in high school and the grades achieved in those courses. A strong college preparatory curriculum is recommended. All students who are admitted must meet the Minimum Course Requirements (MCR) of The University of North Carolina system. Special attention may be given to work completed during the senior year.
- Scores achieved on either the SAT or the American College Test (ACT).
- Academic performance in college dual enrollment courses or on placement examinations. Applicants should submit official college records and examination results as soon as they are available.
- Priority consideration for admission will be given to applications completed by March 1 for the fall term.

Admission to the Academic Success Program. Students whose high school records and test scores do not qualify them for standard admission but who show potential for successful college work may be considered for admission to the university's Academic Success Program (ASP). Students admitted into the ASP still must meet all Minimum Course Requirements (MCR) prior to enrollment into the regular fall term. An applicant's high school records and ACT or SAT scores will be the primary information used to determine admission. The applicant must demonstrate the aptitude and motivation necessary to be able to successfully

complete summer coursework and between twelve and sixteen semester hours of college course work in the first semester of enrollment.

The ASP program features additional tutoring and small, clustered classes that are designed to ease the transition from high school to college. Freshmen admitted to the ASP program are required to begin their program during the summer term when they will be provided with special assistance.

Transfer Students. Applicants must have official transcripts, with statements of honorable dismissal, submitted by all institutions formerly attended. The applicant must meet first-year admission requirements and submit an official high school transcript with SAT or ACT test results, unless the application meets exception criteria. Transfer applications and required documentation should be submitted by June 1 for fall admission, and by April 15 for summer terms. The deadline for spring is Nov. 15.

Admission decisions primarily will be based upon a transfer student's academic performance in college. Applicants should have earned a minimum higher education grade point average (GPA) of 2.00 (C average) on all work attempted; however, a minimum 2.00 does not ensure admission to the university or to a specific program of study. Applicants who are ineligible to return to the last institution attended for any reason cannot qualify for admission.

Students transferring from any unaccredited institution, if admitted, may be placed on academic probation and may be permitted to validate transfer credits by attaining satisfactory grades at Western Carolina University or successfully completing validation examinations.

The academic records of transfer students will be evaluated by the Office of the Registrar, the Advising Center and the department head of the student's major. University policies on transfer of undergraduate credit are explained in the section of this catalog on academic regulations. See complete admission requirements at <http://catalog.wcu.edu/content.php?catoid=31&navoid=673> for additional information.

Internal Transfers. WCU students in good standing can change their major or add academic programs. A student who decides to declare or change a major must complete the declaration process in order to be assigned a new adviser in the appropriate department and to change the official records of the university. The student secures the declaration form from the present adviser or department head and completes the procedure by following the instructions on the form. The new program of study should appear on the next transcript that is issued after the completed form has been submitted to the registrar.

Student Achievement:

- The Construction Management Department awarded three scholarships for the 2014-2015 academic year.
- The WCU student team placed 6th out of 35 teams in the NAHB Residential Construction National Competition in Las Vegas in 2014. This represented the third time in the last four years that the WCU team placed in the top ten.
- The WCU team student team placed 4th in the AGC Civil construction competition in Atlanta, Georgia in 2014.

Dean's List Students

Class	Fall 2013		Spring 2014	
	No.	%	No.	%
Freshmen	6	25%	0	0%
Sophomores	4	14%	5	15%
Juniors	5	17%	3	12%
Seniors	10	23%	6	13%
Total	25	20%	14	12%

Graduates and Placement Data

Number of Graduates.

Year	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Baccalaureate	65	71	74	47	34	In process
Masters	10	13	14	22	4	In process

Placement Data (2012-13 undergraduates; most graduate students are employed during their pursuit of the MCM degree).

Type of Employer	Number of Graduates
Construction related employment	2
Construction or construction management firm	22
Material or equipment supplier	2
Owner (utility, R.R., etc.)	2
Design or development	
Other	1
Continuing education	
Other	
Non-construction employment	1
Seeking employment	2
No information	2
Total	34

The average annual salary for the above graduates is approximately \$55,000 plus good benefits.

Academic Quality Plan

A. Assessment Plan

1. Provide a copy of the construction educational program's Assessment Plan that at a minimum includes:

a) *Mission Statement of the Construction Educational Program.*

The mission of Construction Management (CM) Program at Western Carolina University (WCU) is to employ a construction industry focus to improve lives by educating students to be industry-ready leaders and by providing thought leadership to enhance industry, economic and community development through academic programs, educational outreach, and research. The CM program is engaged in continuous quality improvement, in alignment with its mission, the mission of the University, and the mission of the University of North Carolina system. In alignment with the University, the CM program contributes to WCU's University of North Carolina Tomorrow plan, and the WCU Quality Enhancement Plan (QEP). Additionally, the CM program provides significant support for WCU's designation as a Carnegie Foundation Community Engaged University.

The core values and guiding principles of the CM program are:

- Excellence in scholarship, teaching, and learning
- Passion for organizational effectiveness
- Focus of sustainable organizational models
- Responsible stewardship of resources
- Free and open exchange of ideas
- Environmental sustainability
- Collaboration with and respect for our communities
- Cultural diversity and equal opportunity

Based upon the intentions enumerated above, the CM program has established Goals and Objectives, supported by a number of assessment activities to evaluate current performance and assess improvement initiatives.

The current Program Goals are:

- Goal 1: To provide continually improving and advancing curricula that prepare students to be leaders in the construction industry.**
- Goal 2: To support close student participation with the construction industry through opportunities such as student organizations, community outreach, student competitions, and internships.**
- Goal 3: To provide service and outreach to the construction industry at the local, regional, and national levels.**
- Goal 5: To provide faculty opportunities for continued professional growth.**

b) Educational Program Objectives.

The current Program Objectives are:

- Students will be provided with a well-recognized, industry-aligned program.
- Our students will express a high level of satisfaction with the program and with faculty support for the student learning process.
- Our students will be able to demonstrate a high level of competence with respect to the construction industry (i.e., will be industry ready).
- Our students will be well prepared to be professionals, and to be leaders in the construction industry.
- Our program supports students in finding industry-related employment.
- Our students will be closely engaged with the construction industry.
- Our faculty provide scholarship and service to the construction industry, community and students.
- Our faculty effectively support the mission of the Department, Kimmel School, and University.
- Our students and faculty will provide service and outreach to the construction industry.

c) Learning Outcomes of the Construction Educational Program.

Upon graduation, B.S. in Construction Management (CM) students will have:

- a. an ability to select and apply the knowledge, technique, skills, and modern tools of the discipline to broadly-defined construction management activities;
- b. an ability to select and apply knowledge of mathematics, science, business, management, construction and construction science to problems that require the application of construction management principles and applied procedures or methodologies;
- c. an ability to identify, sequence, schedule, and estimate the costs of critical construction activities as associated with successful construction proposals;
- d. the ability to display fundamental knowledge of critical aspects of the body of knowledge expected of constructors entering the construction management profession;
- e. an ability to function effectively as a member or leader on a construction team;
- f. an ability to identify, analyze and solve broadly-defined construction problems;

g. an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;

h. an understanding of the need for an ability to engage in self-directed continuing professional development;

i. an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;

j. a knowledge of the impact of construction in a societal and global context; and

k. and a commitment to cost-effectiveness, quality, timeliness and continuous improvement.

d) Performance Criteria to Measure the Achievement of the Outcomes/Objective.

With respect to each of the objectives and outcomes listed, the Construction Management Department will seek continuous improvement performance. Performance is assessed in a formative manner by exams and assignments during and at the conclusion of each course. Focus groups with students serve to gather suggestions for improvement, and faculty regularly meet to discuss steps that can be taken to improve performance. For example, in prior meetings the faculty had noted the poor performance of students in math and writing, so at the first faculty meeting of the Fall 2013 semester, faculty members met with representatives from the Writing and Learning Commons. The faculty are now working with the staff at the Writing and Learning Commons to better support students in meeting challenges in these realms, and an intensive writing project is being implemented in CM 121, the Introduction to Construction class.

Summative assessment is occurring in CM 452, the Capstone course both with a comprehensive project that is evaluated with a rubric, and through administration of the American Institute of Constructors (AIC) Associate Constructor exam. In both cases, performance is tracked, and achievement is associated with progress toward fully accomplishing the objectives and outcomes enumerated above.

Current performance criteria are listed in Section IX.B.1.f below.

e) Description of assessment tools and assessment findings that are used to measure achievement of Construction Educational Program Educational Objectives and Learning Outcomes.

The current assessment tools are:

Assessment Tool (Activity)
ACCE Accreditation
AIC Associate Constructor (AC) Examination
Senior Exit Surveys
Five-Year Alumni Survey
Construction Industry Advisory Board (CIAB)
Annual Faculty Activity
Faculty Tenure, Promotion, Reappointment, and Post-tenure Review Process
Student Course Evaluations
Career Fair
Placement of Graduates
Student Activities
Service to the Construction Profession
Feedback from Employers on Students Completing Their Mandatory Internships

f) Description of each assessment tool and how the data collected are used to measure achievement of Construction Educational Program Educational Objectives.

Assessment Tool (Activity)	Objective	Indicator of Excellence
ACCE Accreditation	Students will be provided with a well-recognized, industry-aligned program.	Successful reaccreditation (2014). ACCE accreditation is currently offered for baccalaureate degree programs.
AIC Associate Constructor (AC) Examination	Our students will be able to demonstrate a high level of competence with respect to the construction industry (i.e., will be industry ready).	Full participation by graduating seniors, with a pass rate equal to, or exceeding the national average
Senior Exit Surveys	Our students will express a high level of satisfaction with the program.	Completed surveys show that the majority of the seniors are satisfied with the program.
Five-Year Alumni Survey	Our students will be well prepared for the profession.	Implementation process under way.
Construction Industry Advisory Board (CIAB)	<ol style="list-style-type: none"> 1. Our program will be aligned with industry needs. 2. Our students will be prepared to be leaders in the construction industry. 	Regular feedback from the Construction Industry Advisory Board on program direction and course content.
Annual Faculty Activity	<ol style="list-style-type: none"> 1. Our faculty members are able to effectively support student learning objectives. 2. Our faculty members provide scholarship and service to the construction industry, community and students. 	Annual reviews include full faculty participation, and the results show that faculty members are continually seeking professional growth opportunities.

Assessment Tool (Activity)	Objective	Indicator of Excellence
Faculty Tenure, Promotion, Reappointment, and Post-tenure Review Process	Faculty members effectively support the mission of the Department, Kimmel School, and University.	Faculty performance is regularly reviewed to ensure support of departmental and university mission.
Student Course Evaluations	Students are satisfied with the level of faculty support for their learning process.	Scores for all faculty are regularly, at or above the institutional average.
Career Fair	Our program supports students in finding industry-related employment.	Number of construction companies participating in career fairs.
Placement of Graduates	Our program supports students in finding industry-related employment.	Number of graduates placed within 6 months
Student Activities	Our students will be closely engaged with the construction industry.	Number of students participating in student clubs, and number of students participating in service learning activities.
Service to the Construction Profession	<ol style="list-style-type: none"> 1. Our students will be closely engaged with the construction industry. 2. Our students and faculty will provide service and outreach to the construction industry. 	Number of service and outreach activities by faculty and students to regional construction constituents.
Feedback from Employers on Students Completing Their Mandatory Internships	Student will display appropriate progress toward professional competence.	Consistently positive evaluation of students by supervisors, based upon the student evaluation forms completed by internship supervisors.

B. Assessment Implementation Plan

1. Provide the construction educational program’s schedule for planning and assessment.

Planning and assessment are ongoing in the Construction Management Department. Data are collected each semester, and the analysis takes place throughout each semester, and for the summative tools, at the end of each semester.

2. Provide results of the latest assessment cycle which includes:

a) A description of the data collected during the most recent assessment cycle.

Current class performance, student evaluations, rubrics for the Capstone course, and AIC exam results were collected last semester. Annual Faculty Evaluations were completed at the end of the last academic year. Data were collected in all areas, except for the alumni survey. Discussion of a survey process, instrument, and timing are ongoing with Alumni Affairs.

The current status is:

Assessment Tool (Activity)	Data Collected
ACCE Accreditation	Self-study completed. Reaccredited July, 2014.
AIC Associate Constructor (AC) Examination	Administered during Fall and Spring semesters
Senior Exit Surveys	Data collected and analyzed each semester.
Five-Year Alumni Survey	Needs to be done. Anticipate administration in 2015.
Construction Industry Advisory Board (CIAB)	Meetings held Spring 2013, and Spring 2014. Meeting scheduled for November, 2014.
Annual Faculty Activity	Reports collected and evaluated, Spring 2013.
Faculty Tenure, Promotion, Reappointment, and Post-tenure Review Process	Ongoing according to the institutional schedule.
Student Course Evaluations	Ongoing each semester.
Career Fair	Ongoing each Fall and Spring semester.
Placement of Graduates	Data collected each semester.
Student Activities	Evaluated each semester.
Service to the Construction Profession	Evaluated each semester.
Feedback from Employers on Students Completing Their Mandatory Internships	Data collected each semester.

b) An evaluation of the educational program objectives and learning outcomes assessment data compared to stated performance criteria.

Assessment Tool (Activity)	Indicator of Excellence	Assessment Results
ACCE Accreditation	Successful reaccreditation.	<i>Accredited—Ongoing reporting and maintenance.</i>

Assessment Tool (Activity)	Indicator of Excellence	Assessment Results
AIC Associate Constructor (AC) Examination	Full participation by graduating seniors, with a pass rate equal to, or exceeding the national average	<i>Completed - All capstone students take exam, and the student guide is used to cover relevant material. The pass rate is continuously monitored and course content and instruction are adjusted to support student success. An extended analysis is provided following this table.</i>
Senior Exit Surveys	Completed surveys show that the majority of the seniors are satisfied with the program.	<i>Changes in CM 452 Capstone and several other courses have been initiated based upon responses, including a change in the Capstone course from group projects to individual projects. Ongoing monitoring shows a high level of satisfaction.</i>
Five-Year Alumni Survey	Implementation process under way.	<i>Pending – this is a relatively new program, but the number of alumni will soon be large enough to support successful administration of such a survey. Anticipated survey administration in 2015.</i>
Construction Industry Advisory Board (CIAB)	Regular feedback from the CIAB on program direction and course content.	<i>Annual meetings are ongoing. The Board regularly weighs in on curriculum and Program changes. During the 2012 meeting, members voiced interest in faculty with international experience/expertise. Members are also engaged in supporting student competition teams and arranging for industry speakers. During the 2013 meeting, members contributed ideas for recruiting students into the program, noting that we need to “fill the pipeline” if our graduate numbers are going to support industry needs. During the 2014 meeting, members reviewed the curriculum and addressed suggestions for a new construction concentration under the BSE.</i>
Annual Faculty Activity	Annual reviews include full faculty participation, and the results show that faculty members are continually seeking professional growth opportunities.	<i>Each faculty member is required to complete a report of all activities during the current academic year and review the results with the Department Head.</i>

Assessment Tool (Activity)	Indicator of Excellence	Assessment Results
Faculty Tenure, Promotion, Reappointment, and Post-tenure Review Process	Faculty performance is regularly reviewed to ensure support of departmental and university mission.	<i>Prior to tenure, each tenure-track faculty member is reviewed annually for reappointment. Following tenure, each faculty member is reviewed every five years. Beyond such reviews, each faculty member is also subject to a documented annual faculty evaluation completed by the Department Head.</i>
Student Course Evaluations	Scores for all faculty members are regularly, at or above the institutional average.	<i>Each course is subject to the online student evaluation process. Corrective actions have been taken when necessary.</i>
Career Fair	Number of construction companies participating in career fairs.	<i>Two CM career fairs are offered each year with the fall career fair being the largest. During the past two years, there have been more jobs on offer at each career fair than there have been students graduating from the CM program each semester.</i>

Assessment Tool (Activity)	Indicator of Excellence	Assessment Results
Placement of Graduates	Number of graduates placed within 6 months	<p><i>In the senior exit surveys, there is self-reporting of employment offers and ongoing interviews. Results are tabulated each semester. Current results show that during the recession approximately 70% of students have accepted a job offer by the time of graduation and the percentage is increasing as the economy has improved, with 88% placed prior to graduation during the 2012-13 academic year, and 92% during the 2013-14 academic year.</i></p>
Student Activities	Number of students participating in student clubs, and number of students participating in service learning activities.	<p><i>Number of CM majors participating in the clubs has increased, and during the 2011-2012 and 2012-2013 academic years, and is showing increase again during Fall 2013. Students participated in National Associations of Home Builders and Associated Builders and Contractors (ABC) student competitions. Also during the 2011-2012 academic year, the WCU Student Chapter of ABC was recognized as the National Student Chapter of the Year. During the 2012-2013 academic year, the NAHB student team placed fourth in the residential construction student competition, and sixth during the 2013-2014. This is a VERY notable performance. During the 2012-2013 academic year, a student was awarded for outstanding performance on a shadow team at the AGC South East Regional competition, and the WCU team placed 4th in the competition during the 2013-2014 academic year.</i></p> <p><i>A substantial number of service learning projects are completed each year. In the most recent academic year, a Faculty Service Learning Fellow in the Department supported service-learning activity, and the Center for Service Learning recognized this faculty member with the Community Service Award for Outstanding Faculty/Staff Participation.</i></p>
Service to the Construction Profession	Number of service and outreach activities by faculty and students to regional construction constituents.	<p><i>Each year faculty and students work on projects with industry and associations.</i></p>

Assessment Tool (Activity)	Indicator of Excellence	Assessment Results
Feedback from Employers on Students Completing Their Mandatory Internships	Consistently positive evaluation of students by supervisors, based upon the student evaluation forms completed by internship supervisors.	<i>Ongoing monitoring indicates that almost all internships have had very positive feedback from their internship supervisors. This has been true for all of the companies involved in offering internships.</i>

c) Analysis:

Overall, the average score of our students on the AIC exam is increasing slowly, but writing and math remain challenging for our students, both as evidenced in class performance and AIC exam scores. Rubric information from the Capstone course is showing good performance, but in order for students to do well, it is necessary for the instructor to provide substantial remediation. We are seeing increasing participation by construction firms in career fairs, and placement of students at graduation is improving. The CM Club is much more active than it has been for the last three years.

In general, employer feedback regarding the performance of our students during the internship is very positive. The most common negative observation is that the students need more experience. In general the evaluation of knowledge is positive, and experiences such as the internship are intended to expose the students to practical application of what they have learned (often noted by the employer respondents).

Exit surveys and student evaluations suggest improving satisfaction among our students with instruction. This is echoed in the Annual Faculty Evaluations. Faculty members are also engaging in greater levels of scholarship, and the scholarship under way is of greater impact than was true in the past.

No survey of alumni has been completed, and while faculty and students have regularly interacted with professional groups and individuals in the construction industry, in recent times, there have not been professional development seminars and short courses delivered to construction management professionals in our region.

Assessment activities within the Construction Management Department must integrate with institutional efforts, as reflected in the WCU Quality Enhancement Plan (QEP). This integration represents an additional level of assessment. To achieve the expected learning goals of the QEP, WCU has identified a set of core skills and behaviors (outcomes) that are central to a student's development as an integrated, intentional learner. These core expectations include the ability to: Integrate information from a variety of contexts and to Communicate effectively and responsibly. Harmonization of QEP outcomes with the ACCE accrediting agency's expectations was conducted and parallel outcomes mapped. With this, the

Construction Management Department implements and assesses a senior capstone experience integrating several major subject areas for the completion of a project involving regional companies. Both project team assessment and the AIC exam are used to measure the level of outcome attainment.

The student teams act as general contractors tasked with estimating, bidding, scheduling, and planning the financial projections using the supplied context, plans, and specifications. The integration of several knowledge areas are required for completion of the project including: project management, estimation, ethics, scheduling, teaming, market analysis, contracts, legal issues, construction safety, project administration, and effective communication skills. These core areas must be integrated and coupled with both the company's regional context and their business plan context. The Nissan Car Dealership in Asheville, NC and The Haywood Electric Headquarters Facility in Waynesville, NC are examples of companies the student teams have engaged. At each stage of project development, the student teams are required to present their projects using written, graphical, and verbal communications. Aside from assessments conducted by faculty within the department, students complete the AIC Exam, which includes a major evaluation section on effective communication. Additionally, several of the strongest teams are chosen annually to compete at the National Association of Home Builders residential construction management competition. In January 2012, one of the WCU CM teams placed 5th out of 45 teams competing at the national event.

In the last four years, 220 CM students were assessed using data from the AIC exam and capstone project integrated rubrics. Specifically, the level of attainment for each outcome was divided into four categories including excellent, satisfactory, marginal, and unsatisfactory. Aggregate frequency and percentage values were calculated for the four-year period of assessment. For the QEP expectation, "Communicate effectively and responsibly," 29% of the students ranked excellent, 38% ranked satisfactory, 24% ranked marginal, and 9% ranked unsatisfactory. For the QEP expectation, "Integrate information from a variety of contexts," 22% of the students ranked excellent, 54% ranked satisfactory, 15% ranked marginal, and 10% ranked unsatisfactory.

d) Action plans for areas needing improvement.

The Department is working with Alumni Affairs to design and administer a survey of alumni. This should be done in 2015. In addition to the survey, the Department needs to develop other means for tracking alumni and collecting data about the impact of the program on their careers.

The Department will create professional development learning opportunities for professionals in the construction and construction-related fields. The plan is to deliver these courses at Biltmore Park in Asheville. The initial courses should coincide with the first Kimmel School courses offered in the new facility.

Components of the AIC Exam topics will be covered in every Construction Management course. The instructors will work to make alignment between course material and exam topics explicit and clear to students. Faculty will continue to work with the Writing and Learning Commons to enhance support for student success in writing and math.

e) Results of implementation for improvement including any revisions to the educational program's assessment plan along with any reassessments and action plans.

There has been improvement in AIC scores, although there is still ample opportunity to improve the WCU average score. Faculty attention serves to reinforce learning, but so does emphasizing basic skills.

Written communication remains a weak point in the performance of our students. In response to this finding, we have implemented an intensive writing assignment in the Introduction to Construction course. One aspect of this project was that students should go to the Writing Center to receive tutoring. The initial implementation has not been successful in encouraging the students to seek help. There is a need to find a way to get better compliance, and even commitment for seeking assistance.

Capstone performance suggests opportunities to improve integration between classes. It has become clear that many topics require multiple exposures in order for students to retain the knowledge that is required for good performance on the AIC exam.

Finally, the actions enumerated have been undertaken to resolve areas of opportunity for improvement. These actions will be reviewed regularly and reinforced as necessary.

Updated 9/2014