American Council for Construction Education

UNF Department of Construction Management

Volume II

SELF-EVALUATION STUDY

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B. Course Syllabi
   1. BCN 1210C  Construction Materials
   2. BCN 1251  Construction Drawing
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   5. BCN 3012  History & Introduction to Construction
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29. BCN 4870C Heavy Civil Construction I
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Faculty

Dr. John Dryden, Assistant Professor
Dr. Aiyin Jiang, Assistant Professor
Dr. J. David Lambert, Associate Professor
Dr. Mag Malek, Associate Professor and Chair
Dr. Roberto Soares, Assistant Professor
Mr. James Sorce, Academic Advisor and Instructor
Dr. Carol Woodson, Assistant Professor

Adjunct Professors

Ms. Tamara Baker, Adjunct Professor
Mr. Michael Shabla, Adjunct Professor
Mr. Floyd Simpson, Adjunct Professor
Mr. Joseph Varon, Adjunct Professor
Dr. John Dryden

EDUCATION

Doctorate of Philosophy, Building Construction
2006 University of Florida, Gainesville, FL
Dissertation: *A Decision Model for Optimizing the Hydrologic Cycle of High-Performance Buildings*
Advisor: Dr. Charles J. Kibert

Master of Industrial Technology, Construction Management; May 1998
Bowling Green State University, Bowling Green, OH
Thesis: *An Evaluation of the Effectiveness of D-Cracking Preventive Measures*
Advisor: Dr. L. Travis Chapin

Bachelor of Arts, Political Science; May 1993
Miami University, Oxford, OH

EXPERIENCE

Teaching

Assistant Professor, Construction Management, University of North Florida
Fall 2007 - Present
• Courses taught include Estimating I & II, Construction Scheduling, Construction Capstone, and Construction Materials. Completely updated and revamped each course. Greatly expanded the use of Primavera Project Planner in the Construction Scheduling course, and developed nine new soil and concrete laboratory tests for the Construction Materials course.

Laboratory Instructor, Rinker School of Building Construction, University of Florida
Fall 2001 through Fall 2008
• Taught both concrete and soils labs for undergraduate concrete and soils courses. Created additional labs for both courses, including a complete ACI certification option for students.

Instructor, Construction Technology Department, Santa Fe Community College
Fall 2005 through Fall 2006
• Taught Construction Materials section.

Instructor, Rinker School of Building Construction, University of Florida
Fall 2003 through Fall 2005
• Taught one Construction Drawing section.

Research Assistant, Department of Construction Management, Bowling Green State University, Bowling Green, OH, August 1996 - May 1998
• Performed research funded by the Ohio Department of Transportation and the Federal Highway Administration. Investigated the cost effectiveness of various D-cracking preventive measures.
Industry Employment

Project Controls/Scheduler, Technip USA, 2000-2001
• Solely responsible for the development and maintenance of schedule and cost controls for a 12 month industrial construction project.

Project Controls Specialist, Port Authority NY/NJ, 1999-2000
• Responsible for Port Commerce division schedule (over 25000 activities) during conversion from Microsoft Project to Primavera Project Planner.

Program Analyst, Program Planning Professionals, 1998-1999
• Employed on Visteon (Ford Motors) IT Project Management Team contract. Responsible for Korean Ford-Mando Joint Venture plant IT project compliance tracking, updating, and reporting, using Primavera Project Planner.

Graduate Intern, Great Lakes Dredge and Dock Co., 1997
• Duties included surveying, preparing construction documents, and soils testing.

English Instructor, Korea Heavy Industries Co., 1993-1995
• Instructed all phases of English education to Korean employees of a large Korean construction company.

PUBLICATIONS
Dr. Aiyin Jiang

Curriculum Vita

Education
2005 PHD of Construction Science
M.E. Rinker, Sr. School of Building Construction, University of Florida, FL
2002 Master of Science
Warrington College of Business, University of Florida, Gainesville, FL
1996 Master of Engineering
College of Engineering, Southwest Jiaotong University, Chengdu, China
1990 Bachelor of Engineering
College of Engineering, University of Electronic Science and Technology, Chengdu, China

Teaching Experience
2008- present Assistant Professor
Building Construction Management Department, University of North Florida, Jacksonville, FL
Courses taught:
• Construction Operation Scheduling and Planning
• Heavy Civil Construction
• Special Topic

2005- 2008 Assistant Professor
Construction Science Department, University of Cincinnati, Cincinnati, OH
Courses taught/advised:
• Construction Finance and Strategic Planning
• Project Cost Analysis and Control
• Project Scheduling and Planning
• Construction Management
• Construction Documentation and Quality Control
• Mechanics of Materials
• Entrepreneurship through Interdisciplinary Innovative Applications in Technology and Community Service
• Senior Capstone Project

2001-2002 Teaching Assistant
M.E. Rinker, Sr. School of Building Construction, University of Florida, FL
Course taught/advised:
• Project Scheduling and Planning

1996-1999 Lecturer
College of Engineering, Southwest Jiaotong University
Course taught/advised:
• Structural Mechanics
• Estimating
• Descriptive Geometry
• Architectural Drawings
• Mechanical Drawings

**Professional Experience**

2003 Sep-Dec  
Project Engineer  
Suncoast Wall and Ceiling Systems, Inc., Ocala, FL  
Responsibilities: *quantity takeoff, pricing, and preparation of bidding package, using Quickbid Software*

2003 May-Aug  
Project Engineer  
G. W. Robinson Builder, Inc., Gainesville, FL  
Responsibilities: *quantity takeoff, establish cost database, preparation of subcontractor bid invitation, subcontracting, purchase order issuance, using software such as Timberline Estimating, Prohome and AutoCAD*

1998-1999  
Assistant Project Manager  
Construction Engineering Inc., of China, Chengdu Branch, Chengdu, China  
Responsibilities: *Preconstruction*

1990-1993  
Assistant Engineer  
Department of Renovation, University of Electronic Science and Technology, Chengdu, China  
Responsibilities: *estimating, contracting, change order management, project administration*

**Professional Membership and Registration**

2007  
National Association of Women in Construction, Cincinnati Chapter

2006  
Certified Professional Constructor, American Institute of Constructors

2005  
American Association of Cost Engineering

2003  
American Society of Civil Engineering

**Publications and Presentations**

2008, April  

2006, June  

2006, April  


2005, July  
2005, April
Jiang, A. Dissertation: Construction Supply Chain Decision Support Management, April 2005

2004

2003

2002
Issa, R., Flood, I., and Jiang, A. A prototype system for material procurement management based on the SCOR and CPFR models, Proceedings of the Fourth European Conference on Product and Process Modeling in the Building and Related Industries, Portorož/Slovenia, 9-11, Sep., 2002

1998

1996

Research Project Participated
2002-2004 Scalable Extraction of Enterprise Knowledge (SEEK): a major National Science Foundation (NSF) sponsored research initiative undertaken at the University of Florida. The SEEK project involves the multi-disciplinary collaboration of faculty and students in the departments of Computer Science, Industrial Engineering, and the M.E. Rinker, Sr. School of Building Construction. The purpose of the SEEK project is to enable firms of varying size and sophistication to utilize the capabilities of value-adding electronic marketplaces and decision-support tools.

Community Services
2006 – present Member of College Curriculum Committee
2006 – present Faculty Advisor of Student Woman in Construction
2005 – present Faculty Advisor of Undergraduates in Construction Science Department

Honors, Awards and Certificate
2004 Sigma Lambda Chi (SLX), honorary student in University of Florida
2002 Significant Achievement and Accomplishments in Construction Management Education at University of Florida, Recognition from Timberline Software Corp.
2001-2003 Rinker Scholarship
2001-2003 Grinter Fellowship
2000-2001 The Arthur A. Coia and R. P. Vinall Scholarship
2001 SAP Training and Education Certificate
2000 Academic Achievement by an International Student, In Recognition of Earning a Cumulative 4.0 GPA, University of Florida

Appendix A – Faculty Resumes
Dr. J. David Lambert

Educational Background

**Ph.D., Department of Urban and Regional Planning, University of Florida, 1999.**
Major: Architecture (with emphasis on Environmental Planning) *(4.0 G.P.A.)*
Minor: Environmental Engineering
Dissertation topic: Eco-energetic Land Use Characterization for Spatial Analysis of Urban and Regional Landscapes.

**M.S., Virginia Polytechnic Institute and State University, Horticulture, 1982.**

**B.S., Virginia Polytechnic Institute and State University, Horticulture, 1979.**

Professional Experience


**Responsibilities:** Director, Advanced Weather Information Systems Lab (AWIS); Director, Environmental Monitoring, Mapping, Analysis, and Planning Systems Lab (EMMAPS); Co-Director, Applied Global Systems Lab (through 2005); Executive Board Member, UNF Environmental Center.


**Served one year each as a visiting faculty member in the Civil Engineering, Computer Science, and Building Construction Management Departments.**

**Responsibilities:** Co-Director, Applied Global Systems Lab. Fellow and Director of GIS Laboratory, Florida Center for Public Policy and Leadership Development.


**Project Manager,** GeoPlan Center, Department of Urban and Regional Planning, University of Florida, Gainesville, Fl. September, 1990 to October, 1999.

**Responsibilities:** Initiate and coordinate research and planning projects. **Courses Taught:** URP 6272 - Advanced Planning Information Systems, BCN 3281 – Surveying, (Co-Instructor: URP 6341 - Urban GIS Studio, LAA 6656 - Environmental Design, BCN 6341 - GIS in Construction).
Extension Agent II, Department of Forestry, School of Forest Resources and Conservation, Institute of Food and Agricultural Sciences (IFAS), University of Florida, Gainesville, FL. January, 1989 to August, 1990. Responsibilities: Develop and implement continuing education programs for Florida's urban foresters. Conduct research on the development of urban forest management plans and applications using GIS and related technologies.


Extension Assistant, Agricultural Engineering Department, Virginia Tech. August, 1981 to August, 1983. Responsibilities: Develop Extension programs and publications for "Virginia's Program for Agricultural Non-point Source Pollution Abatement".

Teaching Assistant, Agricultural Engineering Department, Virginia Tech. Fall, Spring and Summer Terms, 1979 to 1982. Responsibilities: Teach two sections of AgEn 2110 - Forestry Surveying Lab.


Sponsored Research Activities at UNF


Principal Investigator. UNF Campus Mapping Initiative and Pilot Study. For the UNF Environmental Center and UNF Facilities Management Department. January 2005 – June 2009. ~$90,000 (cumulative total includes funding of lab staff and assistants, GPS equipment, air photos, and software licenses).

Principal Investigator. Florida Highway Patrol Regional Map Series and GIS Database. For the Florida Department of Highway Safety and Motor Vehicles. March 2007 to June 2007. $4,000.


Principal Investigator. JEA Conservation Undergraduate Research Fellowships. For JEA, Inc. July 2006 to June 2009. $16,000. (6 students were funded to assist with “Green Building” research program.)


Principal Investigator. The iFlorida Model Deployment Road Weather Information System. This project was selected in a national competition to be the national intelligent transportation systems demonstration project for the Federal Highway Administration (FHWA) in cooperation with the Florida Department of Transportation. January 2004 to July 2006. $636,991.

Principal Investigator. Development of the ESF8-Community Health Assessment System HAZMAT Incident Response and Assessment Applications. For the Florida Department of Health, Office of Emergency Operations. January 2004 to August 2004. $119,000.


Principal Investigator. Development of a Web-enabled Mesonet Weather Station Network for Northeast Florida - Phase I. A “Cooperative Project” with the National Weather Service Jacksonville Office for the University Corporation for Atmospheric Research. August 2001 to August 2002. $38,965


Co-Principal Investigator. **Wireless Internet Workman’s Compensation.** For Momentum Health Care, Inc. November, 2000 to February, 2001. $9,000.

Co-Principal Investigator. **BC/BSFL Laboratory.** For Blue Cross / Blue Shield of Florida, Inc. May 2001 to May 2002. $150,000

**Sponsored Research Activities at Other Institutions**


Co-Principal Investigator. **Development of a Web-based GIS Application to Support the East Gainesville Sprout Project (A ‘Brownfield’ Redevelopment Project).** For the City of Gainesville, Florida Department of Public Works and the Alachua County Environmental Protection Department. May 1998 to December 1998. $30,000.


Principal Investigator. **Alachua County Property Parcel GIS Database Conversion Project** For Gainesville Regional Utilities, Inc. and the Florida Department of Transportation, in cooperation with the Alachua County Property Appraiser’s Office. November 1995 to July 1996. $15,000 (plus $4,000 software grant from ComGrafix, Inc., Tampa, Florida).


Project Manager. The Paynes Prairie State Preserve GIS Project (State Park System Planning Demonstration Project). For the Florida Department of Environmental Protection. DNR Contract C-7935. September 1992 to June 1993. $60,000.


Research Associate. Alachua Co. GEOMAX Project - Phase 5: Arc/Info Pilot Project - Development of Comprehensive Planning Applications and Databases- Land Use Codes Application. For Alachua County Board of County Commissioners and the Alachua County Information Systems Department. August 1990 to December 1990. $45,000.


Co-Principal Investigator. Pilot Project: Use of LANDSAT Satellite Imagery to Improve County Land Use Planning. For the Charlotte County Planning Department, the Punta Gorda City Planning Department, and the Charlotte County Tax Appraiser’s Office. In cooperation with the IFAS Remote Sensing Laboratory, NASA, the Soil Conservation Service, and the Agricultural Stabilization and Conservation Service. 1986-1987.

Principal Investigator. Miscellaneous Small Grants Supporting Extension Programs. Approximately 30 ‘small grants’ from local businesses and community organizations were received between 1983 and 1989 in support of Extension programs and demonstration projects. $72,000 in cash and in-kind contributions of equipment/supplies.

Volunteer Coordinator. Charlotte County Master Gardeners and the Charlotte Harbor Native Plant Advisory Council. Over 250 volunteers were trained and directed between 1983 and 1988. Volunteers donated over 17,000 hours of service to these programs and received many local and statewide awards and recognitions for their services to the community. (A very conservative estimate of the value of their donated time: $170,000).

Selected Faculty Service

Chairman, UNF Research Committee – Serving from Fall 2003 to Summer 2005
Secretary, UNF Research Committee – Fall 2002 to Summer 2003
Member, UNF Research Committee – Serving from Fall 2005 to Summer 2006
Member, UNF Faculty Association Executive Committee - Fall 2003 to Summer 2005
University Site License Coordinator – GIS-related software, Environmental Systems Research Institute, January 2000 to present. Presented faculty training seminars (in cooperation with Office of Faculty Enhancement), numerous guest lectures for classes in COBA, COCSE, COH, COAS, and COEHS, and one-on-one consultations with faculty.
Search Committee member – Served on committees for Civil and Mechanical Engineering and Building Construction Management faculty positions, Assoc. Provost for Research and Dean of Graduate School, and Assistant Vice President for Research.
Member, Executive Board of Directors - UNF Environmental Center.

Patents


Publications


Lambert, J. D., R. Richardson, N. Chape, and P.T. Welsh, 2006. “Modeling Propensity for Fog on Interstate 10”. ESRI Map Book – Volume 21. Environmental Systems Research Institute, Redlands, CA. July, 2006. ISBN: 1-58948-163-1 (This is an annual peer reviewed publication that presents a collection of maps with abstracts describing the year’s best GIS-related research conducted worldwide – only about 10% of submissions are selected for publication in this book which is distributed to ~25,000 GIS professionals each year).


Appendix A – Faculty Resumes


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**Maps Published**

Lambert, J. D., R. Richardson, N. Chape, and P. T. Welsh., 2006. “*Modeling Propensity for Fog on Interstate 10*”. Environmental Systems Research Institute 2006 Map Book. Page 113. ESRI, Redlands, CA. July, 2006. (This is an annual peer reviewed publication that presents a collection of maps with abstracts describing the year’s best GIS-related research conducted worldwide – only about 10% of the submissions are selected for publication in this book which is distributed to ~25,000 GIS professionals each year).


**International Invited Presentations**


National-level Invited Presentations


State-level Invited Presentations


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Major Conferences Organized

The Bi-Annual Florida Mesonet Conferences. Held at different locations around the State of Florida. Five conferences have been conducted to date. Funded by NOAA and organized by the Advanced Weather Information Systems Lab. 2005 to present.


Professional and Community Involvement

JEA “Green Built Homes” Advisory Council (2005 – present)
U. S. Green Building Council (Charter member, North Florida Chapter, 2003 – present)
Florida Department of Transportation ITS Advisory Council (2005 – 2006)
First Coast ITS Advisory Council (2005 – present)
Lower St. Johns Rivers Technical Advisory Committee (2006 – present)
Intelligent Transportation Systems Florida Association (Board Director, 2003-2006)
American Society of Photogrammetry and Remote Sensing (1991 - present)
Northeast Florida GIS Users Group (charter member, 2000 – present)
North Florida Weather Association (2001 – present)
Punta Gorda Downtown Revitalization Committee (January 1985 to March 1988)
Punta Gorda Urban Design and Architectural Review Committee (January 1985 to March 1988)
Charlotte County Tree Ordinance Committee (1984 - 1988)
Peace River Audubon Society (Conservation Committee, 1985-1988)
Charlotte County Emergency Board (ASCS Damage Assessment Planning (1983-1988)
Charlotte County Comprehensive Plan Review Committee (1986/87)
Organizer and Charter Member, Charlotte Harbor Native Plant Society (1983 – present)
Florida and National Association of County Agricultural Agents (1983-1990)
Florida Native Plant Society (Education Committee Chair, 1985/86)

Technical Skills

ESRI ArcGIS Geographic Information System Software
ERDAS ‘Imagine’ Image Processing Software
Trimble and Magellan GPS (Global Positioning System) Hardware and Software (certified)
Various database, spreadsheet, desktop publishing, web-related, and graphics, etc. programs
Land and Construction Surveying

Awards and Honors

Certificate of Recognition – “7 Consecutive Years of Sponsored Research Funding”. Awarded by the UNF Division of Sponsored Research. October 2006.

Certificate of Recognition – “Magnum PI Award”. Awarded by “the Staff” of the UNF Division of Sponsored Research. October 2006.


2004 NOAA Environmental Hero Award. (National Award for weather-related research).

The National Honor Society of Phi Kappa Phi. Life Member, elected at UF in April, 1999.

Outstanding Graduate Student of the Year Award, Department of Urban and Regional Planning, University of Florida. June, 1994.

NACAA (National Association of County Agricultural Agents) ‘Search for Excellence’ - Public Information Award. 1989. (Awarded for Environmental Education Programs.)
(Award for Educational Materials developed to support Water Conservation Programs.)

Tenure and Promotion to Extension Agent II awarded by the Florida State University System Board of Regents, University of Florida. August, 1988.

Environmentalist of the Year, 1988, Peace River Audubon Society.
(Awarded for conservation achievements over 5 years in Southwest Florida.)


(Awarded for conservation education efforts throughout Southwest Florida.)

Blue Ribbon, American Society of Agricultural Engineers ‘Educational Aids National Competition’. June, 1984. (Awarded for development of "BMPs” publication series about non-point source pollution abatement in agricultural production).

Student Travel Award, American Society of Botanical Gardens and Arboreta. May, 1982.
(Awarded for Master’s Degree Thesis and related work on developing information management systems for botanical gardens.)

Dr. Mag Malek

EDUCATION


-Professional Management Diploma [Graduate Degree], The American University in Cairo, 1977.

PROFESSIONAL EXPERIENCE IN ACADEMIA & INDUSTRY

Teaching Experience Highlights:


Member of the American Council for Construction Education (ACCE), 2009.

Director of graduate studies since 2002. Developed, initiated and implemented the Master Degree program for the department.

Member of the Accrediting body for the American Council for Construction Education (ACCE) and member of the accrediting team in 2007 for Washington University and also the accreditation for the University of Nevada in 2008.

University of North Florida, Tenured Associate Professor at the University of North Florida, Jacksonville Florida, College of Computing, Engineering and Construction (2001 –08/2007). -Acquired a sponsored research grant, educational grants and research contract from the industry. -Leadership role in the development of a new Graduate Study Program (MBA with a construction track) in cooperation with the Coggin College of Business. The Program has been approved in November 2003. Presently serve as graduate studies advisor for CM students.

Georgia Southern University, Assistant Professor, School of Technology, Department of Construction and Contracting, 1998-2000. Awarded Graduate Faculty Status.

Mercer University, Visiting Assistant Professor, School of Engineering, 1997-1998.

University of Central Florida, Adjunct Teacher, College of Engineering, Department of Civil Engineering, 1996-1997.

University of Central Florida, 1993-1996. Conducted research in conjunction with Ph.D. studies. Developed a database for the different concrete systems used nationally and internationally. Developed a comparison for the different methodologies used in the building industry. Documented and analyzed manufacturing and

Industry Experience Highlights:

KENNEDY SPACE CENTER, Thiokol Corporation: Senior System Engineer, 1991-1993. Special Construction Assignments: Participated in reviewing all engineering specifications of the South Wharf Construction Project (the NASA pier on the Atlantic Ocean used mainly for the retrieval of the boosters after each space mission). Concrete repairs, analysis and procedure design for slabs at Cape Canaveral Air Force Station. Participated in design, follow up and study of modification of the Rail System Network used to transfer the boosters’ segments from KSC Florida to Utah.

General Assignments: Coordinated and reviewed design functions and change orders. Revised specification and documents to ensure design met the feasibility requirements supported technical interchange with customers and vendors.

KENNEDY SPACE CENTER, Thiokol Corporation, System Engineer, 1989-1991. Performed testing for the Atlas Retrieval Program at the component level; itemized testing, bench testing and integrated testing. Participated in writing proposals for Air Force contracts (the RFP for the minute man missile sites).


RESEARCH AND PUBLICATIONS

Refereed Publications
3. Nondestructive Concrete distress Investigation. The Association of Schools of Construction (ASC) conference to be presented in February 2010.


9. “Long Distance Learning Using Innovative Web Based Technology, Case study for long distance learning between the University of North Florida (UNF) and the American University in Cairo (AUC)”. Published and presented at the Associated School of Construction (ASC) conference in Clemson and nominated best paper 2003. (Refereed).


11. “Historical Building Restoration in the Jacksonville, Florida Area” (Research grant awarded, $5000). Published at the IAMOT conference in France 2003. (Refereed, presented and abstract published in the conference proceedings).


**Other Publications:**

GRANTS AND DONATIONS
-$25,000 Concrete inspection, testing and technical supervision.
-$6,500 Secured consulting contract for selection of specialized sub contractor.
-$276,000, Primavera Corporation to implement the internet managing tool.
-$55,000, Primavera Corporation in an effort to add the computing component to the
UNF Construction Management curriculum.
-$40,000, Obtained Expedition software as a management tool in construction.
-$6,000, secured a consulting contract for the inspection, testing and restoration of
concrete, Stonewood Association.
-$5,000, UNF Board of Trustees. Report of the study provided.
-$2500, UNF grant, Transformation Learning Opportunity (TLO) program for
International Studies.

OTHER ACADEMIC AND PROFESSIONAL LEADERSHIP ACTIVITIES
1. Serve as Chair of the department starting 08/2007.
2. Director of Graduate Studies Program since 2002.
3. Member of the accreditation visits for the University of Washington in 2007 and also
   The University of Nevada in Las Vegas UNLV (Nevada) in 2008.
4. Nominated as the College representative in the Quality Enhancement Committee
   (QEP) executive council (2008).
5. Department representative in the College curriculum review committee.
6. College representative in the International council of the University. Dr. Malek added an
   international component for the Building Construction Management program. In this initiative,
   students would be able to see the historic structures in Europe and other locations outside the US.
   This is consisted with UNF’s strategic desires and will be a first for the College of Computing,
   Engineering, and Construction. In partnership with the International Student Center, Dr. Malek
   has initiated an effort to place an international component into the BCM curriculum. Initial
   discussions have been held with the American University in Paris to allow students in BCM’s
   History of Construction course to visit different historic site in Paris and London. This initiative
   is in concert with UNF’s strategic objective of expanding its international ties. This initiative is
   the first international program for the college.

Dr. Malek also initiated the cooperation with the American University in Dubai to enhance the
construction knowledge of the technical personnel of the American and European firms working
in substantial projects in that part of the world.

Dr. Malek organized a study abroad program for the students and they visited construction
projects in Montreal (Canada) and Quebec City (Canada) in May 2006.

Dr. Malek organized a study abroad program for the students and they visited construction
projects in Dubai (UAE) and Cairo (Egypt) in March 2008. The study abroad was sponsored by
Stellar Construction Corporation and The American University in Cairo.
7. Served as Chair of the Faculty Search Committee for BCM including all meetings and
   correspondence associated with this task.
8. Member of the CCEC Technical Support Services Committee.
9. Lead the process associated with the MS degree proposal and assumed the responsibility of
   studying the viability of the graduate program. Worked in cooperation with the College of
   Business to develop a proposed MBA with a Construction Management track for BCM students
   and industry executives. Made a presentation to the industry advisory committee explaining this
   proposal and it was overwhelmingly approved.
10. Worked on the layout of the new Science & Engineering Building BCM Construction Materials Laboratory and prepared AUTOCAD detailed drawing of needed furniture, their location, required cabinets, tables as well as needed equipment for the new academic laboratory.

11. Leading the effort within the department to implement long distance learning capability. Conducting liaison activities with FIU and UCF in the long distance learning methods employed in their construction programs.

12. Dr. Malek has had a significant impact on the BCM curriculum. He has resolved the accreditation comments of overlap in a number of courses. He has taken the lead to introduce computing into the program. Prior to his coming to UNF, there was no construction computing in the program. This fall yet another course will introduce a new popular industry application in project management. Likewise, Dr. Malek is currently preparing to introduce into the curriculum the first laboratory course in the BCM program.

13. Dr. Malek has taken the lead in the department on helping to define a path for the department on distance learning. This last year he has begun using Blackboard and he has visited FIU to review their approach for content creation and delivery.

14. Faculty Advisor of the Sigma Lambda Chi- Honor’s Society in the department. Dr. Malek established this chapter for UNF in 2001.

**HIGHLIGHTS OF QUALIFICATIONS & CONSTRUCTION EXPERIENCE**

- Developed a database for national and international concrete systems and conducted research in constructability in conjunction with the Ph.D. program (1993-1996).

- Over 150,000 square feet concrete roof and tank surface and subsurface waterproofing experience (1986-1989).
- Managed all facets of planning and bidding for $40 million high-rise towers project.
  Set-up the project schedule managed the daily site operations, responsible of approving and implementing the change orders with the Engineer and resolved disputes with the owner (1979-1983).

- Over Ten years of construction management experience.
- Five years of concrete construction site-work.

**LANGUAGES**

Fluent in English, French and Arabic.

**SPECIAL TRAINING**

Industrial Training Program.
Kennedy Space Center Computer Department; a variety of software courses.

**REGISTRATION**

Member of the Association of Civil Engineers (ASCE).
Member of the Associated Schools of Construction.
Established the Honor’s Society (Sigma Lambda Chi/SLC) for the Construction Management at UNF and serve as the faculty advisor.
Member of the AGC(Association of the General Contractors of greater Florida.
Member of ABC Association.

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Member of the American Council for Construction Education (ACCE) board of trustees. Representative of NEFBA at the ACCE board. Real Estate license (Broker) in the State of Florida.

**COMMUNITY SERVICE**
- Sponsored Community service projects through the Rotary club, Builder’s Care and UNF
- Served as Judge, American General Contractors Association (AGC) Horizon award (2009).
- Served as Judge, American General Contractors Association (AGC) Horizon award (2008).
- Served as a judge, UNF symposium (2006 and 2007).
- Prepared a seminar for the Construction Industry in partnership with UNF Continuing Education.
- Developed the construction execution schedule for Habitat for Humanity (Habi JAx) (2002).
- Volunteer in the fund raising activities for the Church of Our Saviour.

**UNIVERSITY SERVICE**
- Member, ACCE Accreditation body for Construction and member of the accreditation team visiting the University of Nevada in Las Vegas in 2008.
- Member, ACCE Accreditation body for Construction and member of the accreditation team visiting the University of Washington in Seattle in 2007.
- Member and College representative, UNF Quality Enhancement Plan for SACS accreditation, November 2007.
- Established Academic international relations and cooperation with the School of Engineering “Ecole Centrale” in France and with their community college as well; “Lycee Livet” in 2007.
- Organized the career fair for the College of Engineering, Computing and Construction.
- Developed and generated articulation agreement between UNF and Santa Fe community College.
- Nominated for the undergraduate teaching award.
- Member of the UNF International Council for 3 consecutive years.
- Chair the search committee for a new faculty member of the BCM department.
- Member, search committee for a new Chair, BCM department.
- Appointed as the college representative for collaborative international studies and research.
- Leadership in establishing the graduate program for the Building Construction Department.
- Established the Honor’s Society (Sigma Lambda Chi) and serve as faculty advisor for UNF, BCM students.
- Focal point in establishing the MBA with the construction track in cooperation with UNF Coggin College of Business.
- Member of the BCM Curriculum Review Committee.
- Elected Member of the College Technical Support Services Committee.
- Established the Construction Materials Laboratory (selected and ordered the equipment and developed the laboratory class syllabus and experiments to be conducted).
- Leadership role in BCM department in exploring the application of internet technology in the BCM curriculum.
- Working on conducting seminars with the UNF Continuing Education Department.
Dr. Roberto Soares

EDUCATION
PhD- Civil Engineering- Public Works -1999
   University of Florida, Gainesville, Florida
DSc.- Production Engineering- Construction Management-1996
   Federal University of Rio de Janeiro, COPPE, Rio de Janeiro
MBA- Business Administration and Finance-1983
   Loma Linda University, Loma Linda, CA
BSCE-Project Management-1970
   Federal Rural University of Rio de Janeiro, UFRRJ, Rio de Janeiro,

SPECIALIZATION COURSES
Construction:
- OSHA-Occupational Safety & Health Administration, University of Florida
- CPR/First Aid, McCarthy
- Masonry Workshop University Professors, Clemson University
- Solving Water Intrusion and Mold Problems in North Carolina, ECU
- Urban Travel Demand, FHA
- Highway Programming Financing, FHA
- Production Engineering for Construction Industry, Sao Paulo University
- Coordination of Erection of Process Plants, Foster wheeler
- Coordination of Industrial Projects, Brazilian Petroleum Institute
- Benchmarking Best Practices in Supply Chain management for Manufacture, ECU
- Value-Engineering/Value Analysis, Sao Paulo University
- Economic Engineering, PUC

Computer Applications for Construction:
- Prolog Manager, McCarthy
- Primavera, FIU
- Management of Small Computer Systems, SESC
- PONTIS, University of Florida
- CAD

Teaching/Research:
- Categorizing to Learn: Simple In-class Activities That Make Your Students Think, CU
- Workshop: Training for Classroom Peer Review Observation, ECU
- Twelve Keys to successful grant writing, ECU
- Giving and Receiving Feedback on Teaching-Workshop, ECU
- Taping and Encouraging Individual Creativity, ECU
- Promoting Higher Level Thinking ECU

Business:
- Studies on Policy and Strategy, ESG

ACADEMIC APPOINTMENTS
UNF- University of North Florida - Assistant Professor
   Construction Management Department 2008- to present
ECU-East Carolina University- Assistant Professor
   Department of Construction Managemnt-2003-2004
CU-Clemson University- Assistant Professor
   Department of Construction Science and Management -2000-2003
FIU-Florida International University- Assistant Professor,
   Department of Construction Management-1999-2000
FUB-Federal University of Brazil- Professor, School of Engineering-1990-1996
COURSES TAUGHT IN CONSTRUCTION MANAGEMENT

RESEARCH
- Bridge User Costs, Florida DOT
- Florida Rehabilitation Subcode, Building Construction Industry Advisory Committee
- Using Benefit-Cost Analysis Procedures in Transportation Planning, FHWA/NHI
- Autopietic Principles in Construction of Affordable Houses, CNPQ/ UFB
- Improving Paint Pigment Solubility, Alclor
- Using Industrial Solid Effluent on gypsum construction boards, Alclor/FUB

AWARDS
Superior Achievement Award-1999
  National Highway Institute, Washington, DC,
Eisenhower Research Fellowship Award 1998
  Federal Highway Administration, Washington, DC
National Council of Research and Development Award,1992
  Coordination of Graduated Development, Brazil
Distinguished Professor Award-1995
  Federal University of Brazil, Rio de Janeiro

PUBLICATIONS

**SERVICE**

Construction of a Community Church in Ayden NC, Construction of Affordable houses for Habitat for humanity using construction students, Repair and small remodeling of houses using volunteers for community, Academic Advisor for Construction Management Students, Advisor for Student Chapter Association (AGC), Advisor for Construction Management students team for AGC competition at Las Vegas, Judge for bridge team competition for high school students, Judge for Science fair at middle and grading schools, Member of search committee for faculty, Member of Community School Board, member of the publications committee, Computer committee department representative to wireless installation, Student trainer for habitat for Humanity projects, Field Trip leader for construction management students, Promoter of the construction management career between prospective students in high school level.

**LANGUAGE SKILLS**

Fluent in English, Spanish and Portuguese.

**AFFILIATIONS**

AIC- American Institute of Constructors- Constructor Member.
ASCE- American Society of Civil Engineers- Student Chapter.
CREA- Regional Counsel of Architecture and Engineering- PE

**PROFESSIONAL ENGINEER EXPERIENCE**

**Project Manager-** TALoving-McCarthy, 2005-2007

Construction, Heart Institute of North Carolina; Six–story, 375,000 SF, $ 150M project.

**Consultant-** Private Practice 1990-1994

**Project Manager-** Alclor Industry- Petrobas subsidiary, Maceio, Brazil, 1985-1989

Scope of Work: Construction of industrial unit and waste facilities to work in corrosive medium not founc in the literature. Technical support for equipment erection/installation, construction of industrial facilities, process water batch and start up for a new plant-$60 million investment to produce raw material for the epoxy industry. Development of new process to treat industrial effluent banned by EPA. Construction support for special structures. New production process development.


New project. $60million petrochemical plant to produce white mineral oil from crude.

Main duties: Approval of contractors work in conformity with design made by Foster Wheeler, an engineering company contracted to develop all detail engineering, architectural design, and construction designs. Contractor’s service provided: site preparation, foundations, buildings construction (industrial, administration, and facilities-water treatment, power station, waste treatment station, change rooms, maintenance, warehouse and filling station, auxiliary services building), coordination/management of equipment erection, training, plant start-up, producing product under specification, formal turn over to operational division.

**Project Manager-** American Cyanamid, Resende/New Jersey, 1997-1999

New project $60 million chemical plant to produce pesticide/ remodeling old plant Management of the design and construction of all facilities since foundations up to start-up. Facilities include water treatment station, electrical station, effluent and waste treatment station, steam generation, tank farm and process plant. Approvals of contractors work, budget control, schedule control, critical equipment fabrication follow-up, punch list management, and day- by-day administrative issues.
Project Engineer- Foster Wheeler, Rio de Janeiro/ New Jersey, 1975-1976
New project, $110 million for a petrochemical plant to produce polyethylene.
Coordination of engineering design including detail engineering design, architectural design, and
construction design. Bid analysis for equipment vendors selection and recommendation for client
approval (procurement was make at international level, mainly at USA, South America, Japan,
and Europe) Basic design was developed in Japan, detailing design in Brazil, and construction at
Brazil. Progress report, technical specification compatibility, and construction contractor
selection.

Production Manager- Dr. Scholl, Inc. Rio de Janeiro, Brazil, 1971-1972
Existing old facility to produce orthopedic products, shoes, pharmaceuticals, and cosmetics
products at Brazil. Production planning, day-to-day activities to manage all industrial facilities
production output, inventory control, warehouse, purchasing, and shipment at national level.
Remodeling of an industrial unit with introduction of automated assembly line to increase
production and quality.

TEACHING PHILOSOPHY

My teaching philosophy is derived from my experience as both a student and an
instructor. I believe that the first and foremost goal of a teacher is to assist students in making
lasting changes in their behavior. In order to accomplish this goal, two integral parts are needed
to succeed passion regarding the teaching profession and genuine interest in students’ success. I
feel a sense of responsibility not only to impart knowledge to students, but also to assist them in
the practical application of that knowledge. My experience shows that the best way to accomplish
this is to reach students’ hearts. I love studying and teaching construction issues, and I believe
that the excitement I display in a classroom is a natural result of this fact. I also believe that
construction builds a great sense of accomplishment and opportunity to improve quality of life for
the society in general and I put a lot of emphasis on this concept in my teaching. Once students
are assured I care about their welfare, it is much easier to speak to their minds and expand their
knowledge.

Although at times useful or necessary, I consider lecturing to be the least important and
effective teaching technique. I believe that the time spent in a classroom is far better spent when
students are involved in interactive activities such as group discussions, simulations,
presentations, problem-oriented case studies, and role-play. Designating classroom time for such
stimulating teaching techniques creates a student-centered, active learning environment. Students
can freely take charge of their own learning through creative, enjoyable, and appropriate learning
activities. Students’ unique sets of experiences, skills, abilities, and learning styles can be
addressed and critical thinking can be fostered. The benefits of this type of learning go beyond
accomplishing course objectives. Students acquire skills to deal with real life situations in their
private and professional life, which results in the ultimate success of a teacher – preparing students to have gratifying personal and professional futures.

What I really like about teaching is the opportunity to interact with students, seeing them grow, and learning from them. I recognize that I must continually grow professionally, and an important part of this growth process is to address issues provided by feedback from my students. I firmly believe that they know best whether my teaching is effective. Thus, I believe that each interaction with students can be an opportunity to identify areas of improvement of my performance as an instructor.
Mr. James Sorce

EDUCATION
University of North Florida, Jacksonville, Fl

University of North Florida, Jacksonville, Fl

EDUCATIONAL EXPERIENCE
07/08 – Present - Academic Advisor & Instructor UNIVERSITY OF NORTH FLORIDA
• Guide students through the construction curriculum at UNF and advise career paths.
• Participate in strategic planning for the Building Construction Management program.
• Provide service for student registration, graduation, and counsel transfer students on UNF policies.
• Schedule all construction classes at the university and certify all Construction Management graduates.
• Represent the Construction Management department and the University at college recruitment fairs.
• Manage student enrollment to provide maximum utilization of limited classroom space.

08/06 – 07/08 - Advisor & Visiting Professor UNIVERSITY OF NORTH FLORIDA

05/06 - 08/06 - Adjunct Instructor UNIVERSITY OF NORTH FLORIDA

CLASSES TAUGHT
Fall 2006 – Present: BCN 4753 Construction Administration and Economics and BCN 4931 Senior Seminar
Summer 2009 -BCN 4931 Senior Seminar, BCN 4753 Construction Admin and Economics, Distance Learning Section
Spring 2009 -BCN 4990 Study Abroad: France (co-leader)
Fall 2008 -BCN 4708 Construction Contracts and Documents
Spring 2008 -BCN 4873c Commercial Const. II Study Abroad: Dubai and Egypt (co-leader)
-BCN 4872c Heavy Civil Const. Study Abroad New York/Canada (co-leader)

RELATED EXPERIENCE
10/05- 07/06 - Marketing Coordinator UNIVERSITY OF NORTH FLORIDA, Construction Management
• Designed Power Point presentations for Building Construction Management chairman, faculty and fundraising.
• Organized career fair for the College of Computing, Engineering and Construction.
• Maintained an industry database for construction employers and assisted in employment placing for graduates
• Developed newsletter for the Building Construction Management Department.
3/00 - 5/03 - **Registered Representative MERRILL LYNCH**
- Executed security, stock options and mutual fund trades in a high-volume environment.
- Developed client relationships through the Wealth Management Asset Retention Program.
- Provided analysis and explanation of stock purchase, options, and 401Ks.
- Designated subject matter expert for corporations such as Pepsi, Merck, AT&T, Dupont, Fleetboston, and NCR.
- Retained over $5,000,000 in assets for Merrill Lynch IRA’s.

10/98 - 8/99 - **Marketing Director WALCHLE INVESTMENT GROUP, INC.**
- Provided sales and marketing support for $6,000,000.00 properties at commercial real estate firm.
- Designed 60 page promotional packages, directed production of out-source vendor and cost negotiations.
- Maintained database of management professionals and developers, gathered market data, analyzed trends, monitored competitor activity and maintained acquisition history to identify prospects for future purchases.
- Managed multiple direct mail programs to over 600 recipients, prepared market reports and brochures.
- Created professional sales presentations using Microsoft PowerPoint and participated in presentations to prospective customers.

02/97 - 10/98 - **Customer Service Representative AMERICA ONLINE**
- Provided excellent billing customer service in high-volume production call center environment.
- Maintained account retention program.
- Achieved Coaches Honor Roll, Team Member of the Month, Lowest Call Time.
- Increased company wealth by offering additional products and services.
- Managed elevated calls and assisted representatives with conflicting client issues.

**RECOGNITION**

Construction Management Faculty Member of the Year 2006/2007 and 2007/2008.
Dr. Carol Woodson
Ph.D., AIC, LEED AP

EDUCATION

- Wesleyan College, Macon, Georgia, Bachelor of Fine Arts, December 1974.
  Thesis: Interfacing Traditional and Sustainable Building Materials and Methods: A New Undergraduate Course
  Department of Educational Leadership, Policy and Foundations, 
  Major: Higher Education Administration; Minor: Building Construction 

Areas of Specialization
Construction Management, Project Management, Sustainable Design and Construction, Educational Facilities, and Facility Management

EXPERIENCE

University of North Florida, Jacksonville, Florida, January 2008 to Present
Assistant Professor:
Duties: Prepare lectures, tests and instruct for the following courses: Construction Contracts and Documents, Construction Safety, Green Building II, Mechanical/Electrical Systems.  
Developed curriculum and taught most of the above courses via video distance learning  
Developed a prototype course syllabus for the Department for ACCE requirements delineating correlation of mission statement to course objectives to student assessment.

Other accomplishments:
- Advisor for the Construction Management Association Club.
- Coach for Heavy/Hwy competition team for the ASC/AGC Region 2 competition.
- Member of University of North Florida Distance Learning Committee (2 year term).
- Participant in Construction Management Career Fairs held each semester.
- Member of the Department Curriculum Committee.
- Member of the Department IT Task Force.
- Member ASC Board of Reviewers.
- Participant in organizing Department welcome back cookouts for student body each semester.
- Faculty advisor for Alden School Service Learning project in 2009.
- Faculty participant in ACCE re-accreditation audit.
- Participant in Sigma Lambda Chi new member induction ceremonies held each Spring semester.
- Represented Dept. of Construction Management at ASC National Conference in Spring 2009.
- Took and Passed LEED AP exam to become a LEED Accredited Professional, Summer 2009.

Western Carolina University, Cullowhee, North Carolina, August 2004 to January 2008
Assistant Professor/Tenure Track:
Duties: Prepare lectures, labs, tests, and instruct for the following courses: Construction Materials, Construction Methods, Site Planning and Construction Equipment,
Mechanical/Electrical Systems, Human Factors in Construction (managing people in construction), Facility Management, Project Management, Introduction to Construction Independent Study in Sustainable Construction, Guest lecturer in sustainable construction for other construction classes in the department.

Other accomplishments:
- Chartered Sigma Lambda Chi Chapter at Western Carolina University and remain Faculty Advisor for Sigma Lambda Chi, International Construction Honor Society
- Faculty advisor for the Construction Management Club
- Developed and was Advisor for Fund Raising for the Construction Management Club
- Assisted in preparing the student competition team for the Associated General Contractors regional competition
- Assisted in the development and execution of a recruitment video for the Construction Management Department
- Developed the course concept and syllabus for CM 659, Advanced Topics in Construction Management for the Construction Management Master’s degree.
- Designed and built the Construction Materials Lab for the Construction Management department
- Created, designed and built a Construction Materials Library, compiling samples of construction materials to be used as visuals by the Construction Management faculty in classes.
- Participant in the Construction Management Career Fairs held each semester in assisting employers in hiring graduating seniors.
- Chaired a roundtable discussion for the i7 Millennium conference (Statewide conference) in sustainable construction held at Western Carolina University
- Member University Curriculum Committee 2004-2008
- Chair and member of five faculty search committees
- Member ASC Board of Reviewers
- Co-editor AIC journal, American Professional Constructor
- Member of the Kimmel School Construction Industry Advisory Council
- Profiled in Asheville Times newspaper and local news channel WLOS for community service projects aiding the Humane Society of Jackson County and the Center for Aging.
- Recruiter for a minimum of three WCU open houses yearly to recruit students for the Construction Management Department
- Member of both the Undergraduate and Graduate faculty in Construction Management
- Advisor to 65 construction management students, responsible for advisement and registration.
- Author of several published articles on sustainable construction

Auburn University, Auburn, Alabama, September 1998 to June 1999

Assistant Professor/ Tenure Track:
Duties: Prepare lectures, labs, tests, and instruct for the following courses: Contracting Business, a construction management/contracts and human resource management, Construction Materials, Construction Systems. Taught graduate seminar on sustainable design and construction

Other accomplishments:
- Member of College Research Proposal Committee to review research proposals and award grants
- Invited speaker Chamber of Commerce Women’s Network Seminar
- Invited to give Continuing Education course, Sustainable Building Materials, AIA convention.
- Reviewed and graded undergraduate senior thesis
- Counseled and advised undergraduate students

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State of Florida, Tallahassee, Florida
Smartschools Clearinghouse
March 1998 to August 1998

**Project Manager**
Duties: Smartschools Clearinghouse was a special commission set forth by Gov. Lawton Chiles and the Florida Legislature. Provided professional consulting services for State of Florida school districts to develop plans and assist districts in building school facilities that maximized design and technological innovations with economic savings. Organized and held workshops around the state with industry personnel to develop a best practices manual for school designers.

University of Florida, Gainesville, Florida
August 1995 to June 1997  August 1999 to May 2001

**Graduate Teacher/ Visiting Professor:**
Duties: Prepare lectures, labs, tests, and instruct for the following courses:
Principles of Management in Construction
Construction Materials and Methods
Facilities Management: Structured and updated course content, wrote lecture notes, case studies, compiled visual aids.

**Other accomplishments:**
Wrote new course in Materials and Methods for the Rinker school interfacing sustainable materials with traditional materials by CSI divisions which was accepted and approved.

School Board of Sarasota County, Sarasota, Florida, September 1989 to July 1995

**Project Manager:**
Duties: Responsible for the management of projects from, award of contract to architect, through design, construction, and one year warranty period. Liaison between user group and design team to insure compliance with Department of Education 6A2 regulations, educational specifications and all applicable codes. Reviewed plans and specifications, created and monitored project schedules and budgets, and supervised construction of the project. Conducted job meetings and approved all change orders and pay requests. Insured all Department of Education forms, mandatories, and inspections were performed. Contracted and coordinated all testing agencies and reviewed test results. Coordinated purchases of new furniture and equipment for facility and orchestrated final move in of users. Responsible for an average of 35 million dollars of construction annually. Largest single project: 20 million dollar high school. Project consisted of the development of 72 acres of environmentally sensitive land, 14 buildings , Lan system fiber optic computer network for instructional and administrative use, including classroom video retrieval, international computer linkup, and close circuit satellite link. School consisted of classroom buildings, high school level gymnasium, cafeteria, auditorium complete with a theater stage and T.V. studio, state of the art science labs, fully electronic media center and administration building. High school level athletic facilities joint ventured with local County Parks and Recreation Department. Assisted attorneys in writing interlocal agreements for use and maintenance, easement rights and regulations for all local utility connections. Coordinated with local environmental groups and all regulatory agencies. Coordinated relocation of personnel from the existing campus to the new campus during two week winter recess. Saved school district approximately one million dollars by value engineering plans and specifications and construction costs without sacrificing quality of work.
NCNB Corporation, Tampa, Florida (Bank of America), May 1986 to September 1989  
*Facilities Asset Manager: Vice President*  
Duties: Manager of Facilities Asset Management department. Responsible for all existing NCNB buildings in the State of Florida (300 buildings totaling five million square feet.) Managed staff of three Property Managers, two Building Engineers, and five Maintenance personnel. Responsible for: all renovations, relocation of personnel and all maintenance of existing facilities, yearly inspections of all properties and the formulation of projects and budgets for yearly profit plan. Also, budgeting of all occupancy costs for facilities and monthly monitoring of those costs. (12 million dollar budget) Responsible for reviewing and negotiating maintenance and construction contracts. Directly supervised major renovation projects of a half million dollars and above, and provided technical assistance for Property Managers for projects totaling in excess of one hundred annually. Responsible for $150 million in corporate assets.

*Senior Project Manager: Assistant Vice President:*  
Duties: Similar to Project Manager with expanded number of projects. Supervised 20-25 projects totaling twenty-five million per year. Maintained the highest level of cost savings on contract negotiations and construction costs in the department. Responsible for the conception and implementation of a CPM schedule for all new construction projects and negotiated contract with scheduling firm to monitor projects monthly. Design team member that developed the Florida prototype free-standing branch facility used by NCNB.

*Project Manager: Office:*  
Duties: Responsible for new construction and major renovations of free-standing and tenant facilities. Scope of work included site analysis, preliminary site design review, final layouts, construction documents, bidding and award of contracts. Hired and negotiated all contracts with Architects, Engineers and Contractors. Supervised construction. Responsible for delivering turn-key branch bank for operation.

*Project Manager for Interior Design Division:*  
Duties: Responsible for coordinating, budgeting, scheduling, and supervising progress of all interiors projects. Responsible for schematic design layouts, along with code and city ordinance compliance. Reviewed construction documents for bidding, supervised construction, and negotiated and expedited purchase order contracts with suppliers.

Roy Newsome General Contractor, Inc., Clearwater, Florida, June 1984 - May 1985  
*Construction Manager:*  
Duties: Responsible for eighty-four unit apartment complex. Bid proposals, bid letting, writing subcontracts and purchase orders to suppliers. Responsible for walking plans through permitting procedures and pulling building permits. Supervised and coordinated superintendent and subcontractors. Developed project schedule, keeping project on schedule and budget. Checked and approved monthly draw requests for submission to owner. Company representative to architect, building department and owner.

Duties: Interviewed, hired and trained clerical personnel. Coordinated the conversion of a motel to a time-share condominium. Supervised the closing of the motel, selling of its contents, preparation of property for construction. Coordinated architect, engineer, general contractor and landscaper. Developed time schedule and cash flow for project. Aided attorney in writing the condominium documents, and proposed maintenance budget; designed interiors for units, and assisted in landscape design. Supervised construction and compiled investor marketing prospectus.
Blount Construction Company, Atlanta, Georgia, 1979-1980

Assistant to Vice President:
Duties: General clerical duties, OSHA safety reports, evaluation of safety equipment, weekly personnel utilization reports, weekly material utilization reports, liaison with MARTA (rapid transit authority) on minority utilization and federal regulations.

Prior to 1979 self-employed as professional artist.

Professional Memberships:
- American Institute of Constructors (AIC) at the Constructor level.
  The Constructor level is the second highest level in the organization. The top level of Fellows can only be achieved after 10 years in this organization. The AIC only accepts qualified individuals engaged in Construction. Membership is by invitation and limited to those individuals meeting specified requirements. The Constructor level can only be assigned to persons who have been in construction for a minimum of 15 years and held management positions or a minimum of a Master’s degree. Recognition in AIC is established by including the initials AIC after one’s name and any academic degrees.
- Associated General Contractors (AGC)
- Sigma Lambda Chi, the Construction International Honor Society (SLC)
- ASC Board of Reviewers
- AIC Board of Reviewers
- United States Green Building Council

Honors and Awards:
- Awarded the University of Florida Graduate Teacher Award for 1995/96. Award is campus wide, chosen from 800 graduate teachers.
- Profiled as outstanding graduate teacher in the University of Florida Graduate School Annual Report 1995/96.
- Nominated for the Chancellor’s Meritorious Service to Students award in 2006 at Western Carolina University which is for excellence in advising, recruitment, or retention of undergraduate and graduate students.
- Invited speaker for Auburn Chamber of Commerce conference Women’s Network Seminar Spring 1999
- Directed a roundtable discussion at the i7 Millennium Conference at Western Carolina University in Spring 2005 in Green Building. This was a state-wide conference in North Carolina.
- Guest lecturer, Senior Seminar, M.E. Rinker School of Building Construction, “Construction Management in a Diverse Workforce”.
- Invited to facilitate round table discussion at annual Teach-In Seminar for graduate teaching assistants and new faculty members by the University Center for Excellence in Teaching at the University of Florida
- Student evaluations range from 4.50-4.90 out of 5.0 consistently at UF, Auburn, Western Carolina University, and UNF.

Publications: Refereed:
Woodson, Carol M., Ph. D., AIC (October, 2006)

Paper was submitted in Spring 2007 and returned “revise and resubmit” in Fall 2007 due to length. Journal could not publish a 30 page paper. It was recommended by reviewers that the paper be cut into two or three separate papers and resubmitted for Fall 2008 publication.

Pending refereed

Non-refereed

Certifications and Additional Course Work:

OSHA Construction Outreach Trainer. Completed Fall 2007. Certified by the United States Department of Labor to teach and certify participants for OSHA 10 hour and OSHA 30 hour safety courses.
LEED AP, Summer 2009.
Tamara G. Baker

EDUCATION: Bachelor of Science in Civil Engineering, University of Florida, 1996
Master of Engineering, University of Florida, 1999

CERTIFICATION: Professional Engineer, Florida State Registration No. 60000

WORK EXPERIENCE: 13 Years of Engineering Experience in Jacksonville, FL.

Specializing in Residential, Commercial and Marine Structural Engineering (including
renovations, additions, marine engineering and new construction.)

The University of North Florida, Jacksonville, Florida, Adjunct Professor Aug. ’00 to ‘05&’09.
Professor in the College of Computing Science and Engineering, Department of Building
Construction Management.

Residential structural engineering and small commercial structural engineering.

The Haskell Company, Jacksonville, Florida, Structural Engineer. Nov. ’00 to Sept. ’03
Responsible for foundation design, shop drawings, field inspections, coordinating repairs and

Engineering. Management, design and coordination of geotechnical projects for both

Professional Service Industries, Inc., Jacksonville, Fl, Geotechnical Engineer,Jan.’98 April 99
Management, design and coordination of geotechnical and construction
responsible for foundation design, shop drawings, field inspections, coordinating repairs and

COMPUTER SKILLS:
Word, Excel, AutoCAD, Enercalc, Boise, etc.

ASSOCIATIONS:
Member, Florida Structural Engineers Association.
Member, Residential Engineers Association of Jacksonville, FL, Secretary 2004-2005.

OUTSIDE ACTIVITIES:
Member, Jacksonville, Florida Rose Society, Springfield Area Merchants & Business, SAMBA.
Member, Jacksonville Jeff Galloway Run Group for the Donna Foundation.
Mr. Michael Shabla

May 2008 to Present, The Haskell Company
Senior Structural Engineer: Responsible for the preparation of all structural plans and specs for the design/build of industrial processing facilities, aircraft manufacturing facilities and food processing plants. Supervise and assign functions of supporting structural engineers and designers. Perform field inspections during various stages of construction for compliance with plans, specs, and customer requirements. Prepare and give structural presentations to clients and peers on various aspects of engineering and construction.

Senior Structural Engineer: Responsible for the preparation of all structural plans and specs for the design/build of food processing facilities, power generation facilities and central chilling plants. Supervise and assign functions of supporting structural engineers and designers. Perform field inspections during various stages of construction for compliance with plans, specs, and customer requirements. Prepare and give structural presentations to clients and peers on various aspects of engineering and construction.

Senior Structural Engineer / Project Discipline Lead: Responsible for preparation and interpretation of design criteria and scope of Civil / Structural portion of the project. Has responsible charge of Civil / Structural engineering, design and drafting of projects for the power, pulp and paper industries, including the design of gas turbine generator foundations, deep and shallow foundations, structural steel, masonry and concrete structures. Monitor and supervise work of other engineers, designers, and drafters to achieve goals of quality and production.

Promoted to Civil / Structural / Architectural Department Manager for the Jacksonville, Florida, office in December 2000. Responsible for maintaining a qualified staff of engineers and designers and assigning personnel to projects. Develop and maintain adequate standards and practices to guide and support project activities. Review all work for quality and accuracy. Supervise department staff, including hiring, training and development, salary and performance reviews. Prepare cost estimates and proposals for Civil / Structural portion of projects.

May 1999 to November 1999, ABB Environmental
Senior Structural Engineer: Responsible for the structural design of air pollution control equipment, such as electrostatic precipitators, selective catalytic reactors, scrubbers, and baghouses including the support steel for the power industry. Conceive, configure and design required structures for supplied equipment that operates in temperature ranges of 270°F to 750°F. Perform all calculations necessary for a safe and economical design in accordance with national building codes. Work closely with junior engineers and designers to produce accurate drawings on schedule.

November 1997 to February 1999, Phoenix Products
Engineering Manager: Responsible for the design and fabrication of steel plate structures such as aboveground fuel tanks for the storage of petroleum products. Supervised and directed the activities of an engineer and designer for production work. Worked closely and supervised consulting engineers to develop economical designs of plant equipment when necessary due to workload. Specified materials and welding procedures for fabrication shop. Specified, designed, purchased and installed CNC plasma burning machine with a downdraft table.
March 1992 to October 1997, Environmental Elements Corporation  
Senior Structural Engineer: Responsible for all structural design on projects including frames, trusses, and steel plate structures such as electrostatic precipitators, scrubbers, baghouses and ductwork for fossil-fueled power plants. Conceive, configure, and design the required structures for relatively complex projects. Had responsible charge of the structural engineering and drafting of projects. Work closely and supervised junior engineers and designers to ensure that the drawings were produced accurately and on schedule.

Applications Engineer: Responsible for the preparation of proposals, sizing of precipitators and baghouses, all in accordance with the customers inquiry. Coordinated the efforts among sales, purchasing, estimating, and engineering departments for their input and estimates to support the proposal effort. Interfaced with customers and conducted site visits to determine best course of action for the proposal.

July 1980 to February 1992 Buffalo Tank Corporation (formerly a division of Bethlehem Steel Corporation)

Design Engineer: for the Southern District of Buffalo Tank Corp. responsible for all structural design of pressure vessels, tanks, and bins in accordance with the governing codes (i.e. ASME Section VIII Division 1, API-650, and API-620). This also includes wind and seismic analysis of vessels in accordance with national building codes (i.e. ANSI A58.1-1982, UBC, and SBCCI).

April 1986 to June 1988 – Sales Engineer. Responsible for directs outside sales of fabricated steel products. Solicited business from mechanical and general contractors, petroleum contractors, and industrial accounts such as paper mills. Worked with Architects and Consulting Engineers specifying Buffalo Tank products for their projects, providing design information and budgetary pricing. Territory included Florida north of Lake Okeechobee and an area of Georgia extending from Thomasville to Tifton to Brunswick. Achievements included Top Salesman (1986) with $4.4 million in total sales and Top Salesman (1987) with $4.6 million.

May 1984 to March 1986 – Sales Department. Responsible for performing design calculations in accordance with applicable codes and customer's inquiries. Resolved conflicts between customer requirements and governing codes. Provided detailed fabrication drawings for the fabrication shop with layouts and complete bills of materials.

July 1980 to August 1982 – Shop Foreman. Responsible for directing and assigning hourly personnel to perform their work safely and on time.

Education:

April 1980  University of Pittsburgh – BS in Civil Engineering with a special emphasis in Structural Engineering. Graduated Cum Laude (GPA 3.44).

May 1997  Johns Hopkins University – Masters Degree in Civil Engineering, with emphasis in Structural Engineering.

Professional: Professional Engineer licensed in Florida, License Number 54728; Licenses: Wisconsin, Nevada, Maryland, and Kentucky.

Affiliations:  
AISC – American Institute of Steel Construction  
ACI – American Concrete Institute  
Tau Beta Pi - National Engineering Honorary Society  
Chi Epsilon – National Civil Engineering Honorary Society
Mr. Floyd Simpson

EDUCATION
Master of Engineering, University of Florida, 1997
Master of Science, Florida Institute of Technology, 1992
Bachelor of Science, Florida Institute of Technology, 1990

PROFESSIONAL REGISTRATION/CERTIFICATION
Professional Engineer: Florida- PE 50791; Georgia- PE 25635; North Carolina - PE 34945

PROFESSIONAL MEMBERSHIP
American Society of Civil Engineers
Residential Engineering Association of Northeast Florida

CAREER SUMMARY
Mr. Simpson began his structural engineering career in 1992. Since that time he has gained experience in structural analysis, design, and evaluation of numerous projects located primarily in Florida and Georgia. His primary focus is in the engineering of residential structures, including both new construction and renovation projects. His experience also includes damage assessments of existing structures, along with the preparation of drawings and specifications based on his recommendations for restoration and repair. In addition to his professional engineering experience, Mr. Simpson serves as an adjunct instructor in the Building Construction Management program at the University of North Florida.

AREAS OF EXPERTISE
Mr. Simpson has extensive experience in structural analysis and design of both new construction and renovation projects. Successfully completed designs have included a wide variety of building structures and foundations, truss towers, machinery foundations, and crane structures. His primary design focus currently revolves around the engineering of single and multi-family residential structures. He has also provided recommendations for upgrading existing structures to the latest building code requirements. Responsibilities have included project management, preparation of project drawings and specifications, and generation of opinions of cost.

Mr. Simpson has significant experience in performing field assessments of existing structures, particularly as related to failures of materials and systems. From investigations, he has been able to determine existing structural load carrying capacities and overall design effectiveness. His field evaluations have included the use of both destructive and nondestructive testing methods. As part of his evaluations, he has prepared written reports summarizing findings and presenting recommendations for remedial repair alternatives. He has experience in the specification of repair and restoration programs for concrete, steel, masonry, and wood structures.

Mr. Simpson has also served as an expert witness on numerous occasions in support of both plaintiff and defense counsels.

EMPLOYMENT HISTORY
2002-Present Hulsberg Engineering, Jacksonville, Florida
1996.2002 Law Engineering and Environmental Services, Jacksonville, Florida
1995.1996 Sandwell, Jacksonville, Florida

Appendix A – Faculty Resumes 45
Mr. Joseph Varon

Providing value for Civil, Institutional, Industrial and Commercial projects for over 35 years.

Conceptual Input
Structural systems, value engineering
Product, systems development

Engineering Leadership
Budgeting, scheduling
Coordination, review
Design management
Engineering training & presentations, for both industry and collegiate coursework
Developing, establishing & maintaining standards and procedures

Construction/Production
Project design and construction support
Construction inspection
Product testing quality
Troubleshooting/innovative solutions

Professional Credentials

Education
BSCE University of Florida, 1966
MCE University of Florida, 1967

Licenses
P.E. in Florida and 6 other states
Special Inspector in Florida

Memberships
Florida Engineering Society
National Society of Professional Engineers
Florida Hurricane Catastrophe Fund
Advisory Council

Honors
Tau Beta Pi
Phi Kappa Phi

Engineering Employment Experience

-University of North Florida, Jacksonville, FL, January 2008 present
  Adjunct professor teaching BCN 3224, Superstructures
-Quick Tie Products, Inc, Jacksonville, FL, 2005 2007
  Vice President, Engineering for prestressed cable building holdown manufacturer
  Product research and development (expanded description, page three)
-The Haskell Company, Jacksonville, FL, 19792005
  Chief Engineering Officer, Vice President Arch/Engr and Integration/Innovation
  Previous positions: Chief Civil and Structural Engineer, Project and Sector Principal
  Also directed in house Steel Fabrication Shop, QA, CAD and Reprographics Groups
-Reynolds, Smith and Hills, Jacksonville, FL, 19711979
  Structural Engineer, Asst. Dept. Head, Construction Manager (w/Trigon subsidiary)
-U.S. Army Corps of Engineers, Savannah, GA, 19681971
  Commissioned Officer (achieved rank of Captain), assigned to Structural Engineering
  Section, Savannah District
-Shell Oil Company, Offshore Division, Metarie, LA, LA (6 months)
  Short term employment between college and active duty

Selected Project and Work Experience

The following list represents a very small sample of projects and efforts in which I’ve participated over my career. They were selected to give the reader a sense of diversity, innovation, leadership and progressive responsibility.
Adjunct professor teaching BCN 3224, Superstructures, using my experiences in the design-build industry to convey an industry perspective and understanding of building structural systems to the Construction Management students.

**Quick Tie Products, Inc.**

Product Development, testing, establishing standards and criteria, quality manuals, usage procedures and load tables for engineers and builders in the use of prestressed cable hold-downs which secure walls against hurricane uplift forces.

Project Support Implementing use of this product, engineer and builder training presentations, field inspections and troubleshooting solutions.

Concentrated on the product approval processes of these innovative prestressed steel cables. Specifically:

* Developed the testing protocol for a prestressed cable assembly and originated AC 369, ICC-ES’s Acceptance Criteria for Prestressed Cable Assemblies.
* Presented and received approval from ICCES for this new and unique criteria
* Initiated, participated in, and supervised many different arrangements of both the cable assembly testing and full scale wall testing to establish performance characteristics and allowable load resistance tables.

**The Haskell Company**

- Seawalk Pavilion, Jacksonville Beach, developed structural engineering concept, coordinated engineering efforts, on an innovative project and winner of 10. Architecture, Engineering and Construction awards.
- Florida Baptist Nemours Pedestrian Overpass, Jacksonville, developed structural engineering concept, coordinated intricate structural special erection procedures and quality control efforts.
- St. Joe Office Building, Jacksonville, developed innovative structural engineering systems, structural engineer of record.

**Reynolds, Smith and Hills**

- Florida Capitol Building, Tallahassee, developed structural engineering concepts, led structural design team on the Tower and House/Senate wings, A/E Project Manager on the design and construction of the plaza.
- King Memorial MARTA Station, Atlanta, GA, developed innovative structural engineering concepts for the station’s many components, led structural design team.

**U.S. Army Corps of Engineer District**

Fort Gordon Signal School, Augusta, GA, developed structural engineering concepts and participated in Value Engineering study saving the government over one million dollars (on a five million dollar project), led the structural design team.

**Awarded Army Commendation Medal.**

**Shell Oil Company**

Miscellaneous structural designs of offshore platform components. Supervised offshore geotechnical investigations. Designed innovative lifting system for handling large offshore production decks and was later awarded a U.S. Patent for this system.
B. SYLLABI

Core Course Requirements

BCN 1210C  Construction Materials
BCN 1251  Construction Drawing
BCN 2280  Surveying: Construction Layout (Baker)
BCN 2405  Introduction to Structures
BCN 3012  History & Introduction to Construction
BCN 3223  Soils & Foundations
BCN 3224  Construction Techniques
BCN 3611C  Construction Cost Estimating
BCN 3762  Building Construction Design & Codes
BCN 3782  Introduction to Construction Computing
BCN 4431  Structural Systems
BCN 4591C  Mechanical & Electrical Systems
BCN 4612  Advanced Construction Estimating
BCN 4708  Construction Documents & Contracts
BCN 4709  Construction Project Management Capstone
BCN 4720  Construction Project Planning & Scheduling
BCN 4730  Construction Safety
BCN 4753  Construction Administration & Economics
BCN 4900  Directed Individual Study
BCN 4930  Special Topics: Building Construction
BCN 4931  Seminars: Construction Management
BCN 4944  Construction Management Internship

Elective Courses (6 sch required)

BCN 4587C  Green Construction & Sustainability I
BCN 4594C  Green Construction & Sustainability II
BCN 4751C  Housing & Land Development I
BCN 4758C  Housing & Land Development II
BCN 4801C  Industrial Construction I
BCN 4802C  Industrial Construction II
BCN 4870C  Heavy Civil Construction I
BCN 4871C  Commercial Construction I
BCN 4872C  Heavy Civil Construction II
BCN 4873C  Commercial Construction II
BCM 4990  Study Abroad
BCN 4944  Construction Management Internship
BCN 1210C Construction Materials

Fall 2009
Section Meets T R -18:00-19:15 Building 50 Room 1400

Professor: Dr. Roberto Soares, PhD, PE
Office: Building 50, Room 3130
Office Hours: T R 3:00PM-4:00PM, W 9:00-12:00
Direct Phone/Voice Mail: 620-2153
Email: rsoares@unf.edu

COURSE REQUIREMENTS

Purpose and Objectives
This course offers an introduction to the economic, mechanical, non-mechanical, production, and aesthetic considerations of materials currently used in construction in accordance with the 16 divisions of the Construction Specifications Institute.

Prerequisite: Declared Building Construction majors only

Required Textbooks and Assignments:
There will be assignments from this text in class/take home. Students are encouraged to bring a calculator to the classroom to perform basic calculations. There will be periodic handouts in class for which the students will be whole responsible on examinations.

Special Accommodations: Students with disabilities who seek reasonable accommodations in the classroom or other aspects of performing their coursework must first register with the UNF Disability Resource Center (DRC) located in building 10, room 1201. DRC staff members work with students to obtain required documentation of disability and to identify appropriated accommodations as required by applicable disability laws including the Americans with Disabilities Act (ADA). After receiving all necessary documentation, the DRC staff determines whether a student qualifies for services with the DRC and, if so, the accommodations for the student will be provided. DRC staff then prepares a letter for the student to provide faculty advising them of approved accommodations.

Students expected Outcome
Following the successful completion of this course, students should be capable of identifying, defining and understanding the terms and concepts used in the construction field related with the subjects in study. Students should be able to identify the required construction materials to apply to a design of a structure. Upon completion of a search, the student must be able to communicate that information in a written report.

Class Attendance incentive: 10% of your grade will be increased in consideration of your perfect class attendance. 10% of your grade is a really significant component of your grade; it can boost your final grade up to the next grade level. To encourage this behavior attendance will be taken every class section.

Class attendance Department policy: You must to attend a minimum of 80% of the classes; otherwise you will receive a F grade on the course. If you know you must miss a class for a legitimate medical, military, or judiciary reason, you may apply for an excused absent by supplying official documentation (e.g. s doctor’s note, judge/court document, military authorities signed document)

Examinations: There will be four examinations, pop quizzes, homework assignments and class assignments. All assignments must be turned in at the assigned due date to receive grade. Late assignments will not be accepted to receive grade. No make up for assignments, pop quizzes and class/ homework assignments. QUIZZES AND CLASS ASSIGNMENTS WILL BE DELIVERED WITHOUT PREVIOUS ANOUNCEMENT.
Grading schedule

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 assignments @ 15% each</td>
<td>60%</td>
<td>A</td>
</tr>
<tr>
<td>Pop quizzes</td>
<td>20%</td>
<td>B</td>
</tr>
<tr>
<td>Class/homework assignments</td>
<td>20%</td>
<td>C</td>
</tr>
<tr>
<td>Subtotal</td>
<td>100%</td>
<td>D</td>
</tr>
<tr>
<td>+ Attendance bonus</td>
<td>10%</td>
<td>F</td>
</tr>
<tr>
<td>Possible Total</td>
<td>110%</td>
<td></td>
</tr>
</tbody>
</table>

Grade System

- **A** - 90-100%
- **B** - 80-89%
- **C** - 70-79%
- **D** - 60-69%
- **E** - 59 % and below

Academic Honesty

UNF Policies and Procedures stipulated in the Student Conduct Code will constitute the main regulations determining the expected behavior and attitude. All course assignments are to be performed individually unless otherwise authorized by the instructor. No student shall receive, offer or give assistance not authorized by the professor in the preparation of any assignment.

Class Schedule

We are going to study 24 chapters from the text and we are going to meet 28 times or 15 weeks this semester. The class pace will be accelerated to accommodate time for examinations with a goal to cover in average 1 chapter/class.

BCN1210C-Construction Materials-3 credits

Course schedule

<table>
<thead>
<tr>
<th>August</th>
<th>Mon, 24th</th>
<th>Wed, 26th</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Fall Classes Begin</td>
<td>• Last day students can add to Wait Lists</td>
</tr>
<tr>
<td></td>
<td>• Add/Drop Begins</td>
<td>• Deadline for State Waiver Forms</td>
</tr>
<tr>
<td></td>
<td>• Late Registration begins (additional $100 fee)</td>
<td>• Deadline to Apply as a Learning for a Lifetime (Senior Citizen) student ($100 Late Registration fee applies)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 5:00pm Deadline to Pay/Pend/Defer tuition and fees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Deadline for UNF Tuition Waivers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 5:00pm Deadline to Add/Drop</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Mon, 7th</td>
<td>Wait Lists purged after 5pm</td>
<td></td>
</tr>
<tr>
<td>Fri, 11th</td>
<td>Labor Day</td>
<td></td>
</tr>
<tr>
<td>Fri, 18th</td>
<td>Last day to petition to add a course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deadline for reinstatement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deadline to apply for graduation</td>
<td></td>
</tr>
<tr>
<td>Fri, 11th</td>
<td>Deadline for withdrawal with 25% refund (complete withdrawals only)</td>
<td></td>
</tr>
<tr>
<td>Thu, 15th</td>
<td>MidYear Financial Aid Request Form available in myWings</td>
<td></td>
</tr>
<tr>
<td>Thu, 22nd</td>
<td>Mid-term grades on-line</td>
<td></td>
</tr>
<tr>
<td>Fri, 30th</td>
<td>Spring Schedule available online</td>
<td></td>
</tr>
<tr>
<td>Fri, 6th</td>
<td>Deadline for Withdrawal (no refund)</td>
<td></td>
</tr>
<tr>
<td>Tue, 10th</td>
<td>Spring Registration Time Tickets available in myWings</td>
<td></td>
</tr>
<tr>
<td>Wed, 11th</td>
<td>Veteran's Day</td>
<td></td>
</tr>
<tr>
<td>Fri, 13th</td>
<td>Deadline for Spring term Major Changes</td>
<td></td>
</tr>
<tr>
<td>Mon, 16th</td>
<td>Spring Registration begins by appointment (time ticket)</td>
<td></td>
</tr>
<tr>
<td>Mon, 23rd</td>
<td>Spring term Open Registration begins</td>
<td></td>
</tr>
<tr>
<td>Thu, 26th</td>
<td>Thanksgiving (26th-28th)</td>
<td></td>
</tr>
<tr>
<td>Tue, 1st</td>
<td>Spring Housing rent due - deadline to pay or defer</td>
<td></td>
</tr>
</tbody>
</table>

Appendix B – Course Syllabi
<table>
<thead>
<tr>
<th>Date</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fri, 4th</td>
<td>• Classes End</td>
</tr>
<tr>
<td>Sat, 5th</td>
<td>• Final Exams (5th-11th)</td>
</tr>
</tbody>
</table>
BCN 1251 Construction Drawing

BCN 1251 – SUMMER 2009
CONSTRUCTION DRAWING I
3 Semester Hours

Class Meets: Mondays, Wednesdays, Fridays 12:50pm
Adjunct Professor: Tamara G. Baker, P.E.
Baker Klein Engineering
Phone: 356-8520 Cell: 219-8148
Email: tbaker@bkejax.com

Office Hours: By appointment

Course Objectives: To gain an understanding of how to read and understand construction/architectural drawings, hand sketching, scaling drawings, basic construction abbreviations and understanding plans.

Expected Outcomes: Have knowledge of how to create and read construction/architectural drawings, To be able to hand sketch and properly letter construction/architectural drawings in 2D and 3D, To be able to communicate and discuss aspects of drawings, The ability to work with others in groups to prepare drawings/work assignments in a timely manner.

BCM Program Educational Objectives: To have the ability to work with all types of people, To have the ability to think and reason logically, To have the ability to understand and solve construction problems, To have the ability to make sound economic decisions, To have the ability to communicate clearly and concisely, both orally and written, To have the ability to be computer literate, To know and uphold ethical standards of the field, To have the ability to lead in the construction industry and in the community.

Attendance and Grading: Class attendance is mandatory. If you are not here, how can you learn?

Points will be assigned for homework and Exams. Points will be assigned as follows:
Test #1
Test #2
Final grades will be based on the average of two test scores and in-class assignments or homework.
Homework or In-class assignments=30% of final grade
Test scores=70% of final grade

Final Grades will be based on the following scale:
A=90-100%
B=80-89%
C=70-79%
D=60-69%
F=0-59%

Homework will be DUE ON THE DUE DATE. THERE WILL NOT BE ANY EXCEPTIONS. Group study sessions are encouraged. Two heads are Better than one!

Miscellaneous:
All work in this course shall be done under the standards of Academic Integrity as outlined by the University. Cheating Will NOT be tolerated. Late assignments will not be accepted.
Grades will not be posted.
Please Note: This outline is to be used only as a guide for the subject course and is provided for general study purposes only. All dates and assignments are subject to change.

I __________________, have received a copy of the course outline for the above referenced class and understand what is expected to achieve a passing grade. I certify that all assignments will be completed on my own and represents my effort to learn.

Signed________________Date__________

Email Address: ______________________________________
Name: ______________________________________________
Phone Number (home or cell): ___________________________
Classification (Fresh. Soph. Jr. Sr. Post Bach.)___________

<table>
<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>Day</th>
<th>Material to be Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>MAY 11</td>
<td>M</td>
<td>UNIT 1</td>
</tr>
<tr>
<td>2</td>
<td>MAY 13</td>
<td>W</td>
<td>UNIT 2</td>
</tr>
<tr>
<td>3</td>
<td>MAY 15</td>
<td>F</td>
<td>NO CLASS</td>
</tr>
<tr>
<td>4</td>
<td>MAY 18</td>
<td>M</td>
<td>UNIT 3,4,5</td>
</tr>
<tr>
<td>5</td>
<td>MAY 20</td>
<td>W</td>
<td>UNIT 6,7,8</td>
</tr>
<tr>
<td>6</td>
<td>MAY 22</td>
<td>F</td>
<td>NO CLASS</td>
</tr>
<tr>
<td>7</td>
<td>MAY 25</td>
<td>M</td>
<td>NO CLASS</td>
</tr>
<tr>
<td>8</td>
<td>MAY 27</td>
<td>W</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>MAY 29</td>
<td>F</td>
<td>UNIT 11,12</td>
</tr>
<tr>
<td>10</td>
<td>JUNE 1</td>
<td>M</td>
<td>PLAN READING</td>
</tr>
<tr>
<td>11</td>
<td>JUNE 3</td>
<td>W</td>
<td>UNIT 13-In Class Assignment</td>
</tr>
<tr>
<td>12</td>
<td>JUNE 5</td>
<td>F</td>
<td>PLAN READING</td>
</tr>
<tr>
<td>13</td>
<td>JUNE 8</td>
<td>M</td>
<td>TEST #1</td>
</tr>
<tr>
<td>14</td>
<td>JUNE 10</td>
<td>W</td>
<td>PLAN READING</td>
</tr>
<tr>
<td>15</td>
<td>JUNE 12</td>
<td>F</td>
<td>UNIT 14,15</td>
</tr>
<tr>
<td>16</td>
<td>JUNE 15</td>
<td>M</td>
<td>UNIT 16,17</td>
</tr>
<tr>
<td>17</td>
<td>JUNE 17</td>
<td>W</td>
<td>UNIT 18,19</td>
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<tr>
<td>18</td>
<td>JUNE 19</td>
<td>F</td>
<td>UNIT 20,21</td>
</tr>
<tr>
<td>19</td>
<td>JUNE 22</td>
<td>M</td>
<td>PLAN READING</td>
</tr>
<tr>
<td>20</td>
<td>JUNE 24</td>
<td>W</td>
<td>PLAN READING</td>
</tr>
<tr>
<td>21</td>
<td>JUNE 26</td>
<td>F</td>
<td>UNIT 22-25</td>
</tr>
<tr>
<td>22</td>
<td>JUNE 29</td>
<td>M</td>
<td>UNIT 26-28</td>
</tr>
<tr>
<td></td>
<td>JULY 1</td>
<td>W</td>
<td>FINAL</td>
</tr>
</tbody>
</table>

Note: This outline is subject to change depending on the needs of the class and SCHEDULED EVENTS. This outline is provided for general study purposes only.
BCN 2280 Survey: Construction Layout

SURVEYING: CONSTRUCTION LAYOUT
FALL 2009 3 Semester Hours

Class Meets: Mondays, Wednesdays, 4:30pm
Text: Surveying Fundamental and Practices by Nathanson, Lanzafama and Kissam
Adjunct Professor: Tamara G. Baker, P.E.
Baker Klein Engineering
Phone: 356-8520 Cell: 219-8148
Email: tbaker@bkejax.com

Office Hours: By appointment

Course Objectives: To gain an understanding of how to understand and perform basic surveying fundamentals.

CM Program Educational Objectives: To have the ability to work with all types of people, To have the ability to think and reason logically, To have the ability to understand and solve construction problems, To have the ability to make sound economic decisions, To have the ability to communicate clearly and concisely, both orally and written, To have the ability to be computer literate, To know and uphold ethical standards of the field, To have the ability to lead in the construction industry and in the community.

Attendance and Grading: Class attendance is mandatory. If you are not here, how can you learn?

Points will be assigned for homework and Exams. Points will be assigned as follows:
Test #1
Test #2
Final Project
Final grades will be based on the average of two test scores and final project.
Final Project=30% of final grade
Test scores=70% of final grade
Homeworks will not be graded.

Final Grades will be based on the following scale:
A=90-100%
B=80-89%
C=70-79%
D=60-69%
F=0-59%

Miscellaneous: All work in this course shall be done under the standards of Academic Integrity as outlined by the University. Cheating Will NOT be tolerated. Late assignments will not be accepted. Grades will not be posted.

Please Note: This outline is to be used only as a guide for the subject course and is provided for general study purposes only. All dates and assignments are subject to change.

I ______________, have received a copy of the course outline for the above referenced class and understand what is expected to achieve a passing grade. I certify that all assignments will be completed on my own and represents my effort to learn.

Signed________________Date__________
Email Address: ____________________________________________
Name: __________________________________________________

Appendix B – Course Syllabi
3/4/2011

Phone Number (home or cell):__________________________
Classification (Fresh. Soph. Jr. Sr. Post Bach.)_____________

<table>
<thead>
<tr>
<th>Session</th>
<th>Date</th>
<th>Day</th>
<th>Material to be Covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>August 24</td>
<td>M</td>
<td>History of Surveying</td>
</tr>
<tr>
<td>2</td>
<td>August 26</td>
<td>W</td>
<td>Types of Surveys</td>
</tr>
<tr>
<td>3</td>
<td>August 31</td>
<td>M</td>
<td>Rules in the field</td>
</tr>
<tr>
<td>3</td>
<td>September 2</td>
<td>W</td>
<td>Units, Blunders, Errors</td>
</tr>
<tr>
<td>4</td>
<td>September 7</td>
<td>M</td>
<td>Horizontal Distances, Equip.</td>
</tr>
<tr>
<td>5</td>
<td>September 9</td>
<td>W</td>
<td>Paces, Tapes</td>
</tr>
<tr>
<td>6</td>
<td>September 14</td>
<td>M</td>
<td>Breaking Tape</td>
</tr>
<tr>
<td>7</td>
<td>September 16</td>
<td>W</td>
<td>Field Work, Breaking Tape</td>
</tr>
<tr>
<td>8</td>
<td>September 21</td>
<td>M</td>
<td>EDMI’s Corr.for Temp./ Tape</td>
</tr>
<tr>
<td>9</td>
<td>September 23</td>
<td>W</td>
<td>Review of Homework</td>
</tr>
<tr>
<td>10</td>
<td>September 28</td>
<td>M</td>
<td>Vertical Distances</td>
</tr>
<tr>
<td>11</td>
<td>September 30</td>
<td>W</td>
<td>Leveling and reading Level</td>
</tr>
<tr>
<td>12</td>
<td>October 5</td>
<td>M</td>
<td>Field Work</td>
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<td>13</td>
<td>October 7</td>
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<td>Test #1</td>
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<tr>
<td>14</td>
<td>October 12</td>
<td>M</td>
<td>Hand Signals, Rod Reading</td>
</tr>
<tr>
<td>15</td>
<td>October 14</td>
<td>W</td>
<td>Closure, Precision</td>
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<tr>
<td>16</td>
<td>October 19</td>
<td>M</td>
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<td>17</td>
<td>October 21</td>
<td>W</td>
<td>Angles, Backsite, Foreshite</td>
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<tr>
<td>18</td>
<td>October 26</td>
<td>M</td>
<td>Zenith, Azimuth, Bearing</td>
</tr>
<tr>
<td>19</td>
<td>October 28</td>
<td>W</td>
<td>Theodolites</td>
</tr>
<tr>
<td>20</td>
<td>November 2</td>
<td>M</td>
<td>Field Work</td>
</tr>
<tr>
<td>21</td>
<td>November 9</td>
<td>W</td>
<td>Turning Angles</td>
</tr>
<tr>
<td>22</td>
<td>November 11</td>
<td>M</td>
<td>Closing a Loop</td>
</tr>
<tr>
<td>23</td>
<td>November 16</td>
<td>W</td>
<td>Test #2</td>
</tr>
<tr>
<td>24</td>
<td>November 18</td>
<td>M</td>
<td>Field Work</td>
</tr>
<tr>
<td>25</td>
<td>November 23</td>
<td>W</td>
<td>Highway Curves</td>
</tr>
<tr>
<td>26</td>
<td>November 25</td>
<td>M</td>
<td>Route Surveys</td>
</tr>
<tr>
<td>27</td>
<td>November 30</td>
<td>W</td>
<td>Horizontal Curves</td>
</tr>
<tr>
<td>28</td>
<td>December 2</td>
<td>M</td>
<td>Vertical Curves</td>
</tr>
<tr>
<td>29</td>
<td>December 7</td>
<td>W</td>
<td>Final Project</td>
</tr>
<tr>
<td>30</td>
<td>December 9</td>
<td>M</td>
<td>Final Project</td>
</tr>
</tbody>
</table>

Note: This outline is subject to change depending on the needs of the class and SCHEDULED EVENTS. This outline is provided for general study purposes only.
BCN 2405 Introduction to Structures

Floyd S. Simpson, P.E., Hulsberg Engineering, Inc.
Email: Fsimpson@comcast.net; Office Phone: (904) 886-2401; Office Fax: (904) 260-4367

Spring 2009 SYLLABUS

Course Description
An introductory course in the evaluation of structural behavior as it relates to buildings, the properties of structural materials, and the structural behavior of load resisting members.

An introduction to Statics will include forces, resultants, moments, and reactions. The equilibrium of rigid bodies acted on by outside forces will be examined, along with the creation of free body diagrams to analyze a system of forces on a rigid body.

An introduction to Strength of Materials will include stress and strain, bending, shear, deflection, and stability. The structural behavior of elastic bodies under the effects of external forces will be examined. Simple beams, trusses, frames, and columns will be analyzed.

An understanding of the SI metric system will be developed as the metric system will be used interchangeably with the traditional English system.

Course Objective
The student will upon successful completion of this course have a basic understanding of the nature of forces governing the design and behavior of materials and elements common to building construction.

Course Methodology
Class sessions will include lectures, examples, homework solutions and class discussion. Homework assignments will include both reading and problem solving. All homework will be collected and graded. There will be two mid-term exams and one final exam.

Required Texts

Due to the nature of problem solving and the importance of proper presentation, the use of engineering grid paper is required.

Attendance
Regular attendance is required since class lectures and discussions, including solving of problems in class, are invaluable and not necessarily covered in the text. Students who will unavoidably miss class should make arrangements with fellow students to obtain class notes and class assignments.

Cheating
If a student is caught cheating, all necessary actions will be taken. Any form of cheating on assignments or tests will result in an automatic failure or "F" for the entire course. This policy applies to any student who allows copying or copies. For understanding the concepts in this class, it is helpful to study with another person or with a group. Ask yourself whether you understand or whether you are copying. If you are helping another student, be certain the other student understands and is not copying. Your best insurance is not to hand any assignment to another student.

Grading Criteria
Letter grades are calculated on the percentage of achievement of stated objectives and requirements for the course. Letter grades will be determined according to the following scale:

A = 90 - 100%; B = 80 - 89%; C = 70 - 79%; D = 60 - 69%; F = 0 - 59%
Points will be allocated according to the following schedule:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>25%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>25%</td>
</tr>
<tr>
<td>Project</td>
<td>25%</td>
</tr>
<tr>
<td>Homework</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

For each problem graded during the course, partial credit will be given for proper set-up even if the numerical solution is wrong. Conversely, a correct numerical answer without supporting calculations will receive only partial credit.

**Written Assignments and Examinations**
Homework will be assigned every class session and is due at the start of the following week’s class sessions. Due dates should not be ignored because late assignments will subjected to a late penalty of 50% of the assignment value. Homework is a major component of your grade and its importance should not be taken lightly. Any emergencies should be discussed with the instructor on an individual basis.

Examinations will be closed book types and only the use of a calculator will be allowed.

**Important Comments**
The nature of upper level universities and UNF requires each student to independently overcome any deficiencies in areas that should have been covered in other courses. The course material is calculation intensive and success will depend on the student’s willingness to attend class and practice problems until the subject material is mastered. Experience has shown that there is a direct correlation between class attendance and the overall level of performance.

**Final grades will not be given out through the main office.** Do not call the office concerning your grade.

**Policy on late Withdrawals**
The University policy for dropping a course is in the UNF course schedule booklet.

**TENTATIVE SCHEDULE**
The following schedule is subject to change based on the general progress of the class or unforeseen and unavoidable schedule conflicts.

**Summary of Topics**
- Introduction; Principals of statics; SI units; numerical accuracy (Chap. 1 & 2)
- Resultants of forces; Force vectors (Chap. 3)
- Equilibrium of forces; Free body diagrams (Chap. 4)
- Properties of sections; Centroids and centers of gravity (Chap. 7)
- Moments of inertia (Chap. 8)
- Stress and strain (Chap. 9)
- Shear and bending moment in beams (Chap. 13)
- Stresses in beams (Chap. 13 & 14)

**Exam Dates**
- February 11, 2009
- April 1, 2009
BCN 3012 History of Construction

Summer 2009 Syllabus CRN # 51358
3 credits

Instructor: J. David Lambert, Ph.D.; Email: jlambert@unf.edu
Course Times: Monday, Tuesday, Wednesday, and Thursday 9:00am - 10:40am
Location: Building 50, Room 1402; Office Hours: 10:40am – 11:30am Monday - Thursday in 50/3022


Catalog Description: An analysis of the cultural context of construction, emphasizing its centrality in the evolution and expansion of the built environments as expressions of ethical and aesthetic value systems.

Purpose and Philosophy of Course:
The purpose of this course is to broaden the student's awareness of the significance of construction as a discipline that affects, and is affected by, ethical and aesthetic values in all societies. It emphasizes the critical role that construction has played in the evolution of cultures and looks at the centrality of construction to today’s rapidly changing world. The basis for forming sound judgments and developing wise philosophies in the diverse areas of the construction process will be illustrated. Specifically, the course will be devoted to a historical review of construction and a study of current global issues. Primary focus throughout the course will be on the human elements and issues that have impacted the industry and society.

Expected Outcomes: The student will gain:
-Expanded vocabulary of construction terms used throughout history.
-Appreciation of the role that builders have played in the evolution of civilization.
-Knowledge of how construction methods & materials have developed throughout history.
-Knowledge of the history of significant local construction projects.
-Experience in working with others through team discussions and projects.
-Enhanced personal communication skills, both oral and written.
-Enhanced understanding and appreciation of ethical issues related to worker safety, shoddy workmanship, etc.

Evaluation and Grading
Chapter and Video Reaction Papers 330 points ((12 Chapters + 10 Videos) x 15 points each)
Team Research Project Oral Presentation 200
Team Research Project Paper 200
Take-home Exam Part #1 150
Take-home Exam Part #2 70
Full Attendance Credit 50
Total 1000 points

Note: The final grades will use the plus/minus system.

Course Policies

Learning Methods:
The course will include instructor-led discussions (participation in class discussions is expected of every student), reaction papers for each textbook chapter, in-class viewing and discussion of relevant videotapes, reaction papers for each video, handouts that supplement the text, a research project (by 2-student teams), an oral PowerPoint-based presentation on the research by each student team, a paper based on the research, a take-home exam (based on the in-class
3/4/2011

discussion questions), and submission of an individual “virtual notebook” which will include all of
the reaction papers, the take home exam, and the team research project paper.

**Attendance Policy:**
CM Departmental Class Attendance Policy: “Attendance of BCM classes is mandatory.
**Students must attend 80% of all BCM classes in order to receive a passing grade.**” In this
Summer A term, if you have more than 5 unexcused absences, you will fail the course. If you are
going to miss class, you must notify the instructor in advance of the class by telephone or email to
receive an “excused absence”. An “excused absence” will only be given for an illness or family
emergency which is supported by written documentation.

**Attendance will be noted at the beginning of the class session. “Late arrivals” will not be
recorded for attendance.**
To encourage and reward full participation, 50 points will be earned for missing no more than one
class.

**Assignment Submission Policy:**
*Each assignment must be turned in no later than midnight on the due date noted in the
syllabus._
Upload each assignment to the course Blackboard website using the file naming convention:

<YourLastName-AssignmentName.doc>,  Example: “Lambert-
Video3reactionpaper.doc”.

**There will be no partial credit for late submissions.**

**Reaction Papers:**
*Each student will write a reaction paper for each chapter in the text book that is focused on
how, in your opinion, that chapter's subject matter is relevant to the modern construction
manager. These are “reaction papers”, not book reports. To receive full credit, you should
express your opinions and demonstrate that you have considered the relevance to the industry.
EACH Chapter Reaction Paper should be single-spaced, and be at least one page in length.*

You will also write a reaction paper for each video viewed in class (single-spaced, at least one
page in length for each video). A video reaction paper outline is provided.

Further details and requirements for the chapter and video reaction papers will be discussed in
class. These papers should be clearly labeled at the top of each page with your name and
the name of the chapter or video.

**“Virtual Course Notebook”:**
Be sure to keep a digital copy of each reaction paper to include in your final “Virtual Course
Notebook”. This “notebook” will compile all of your reaction papers, the research project paper,
your exam in one digital document. Convert your word-processing document into a PDF-
format file. Upload a copy of this compilation of your work to the Blackboard site by **Friday, June
19th at Midnight**. Use the file naming convention: <YourLastName-CourseNotebook.doc>.
Organize this “notebook” so that it has a main title page, table of contents, separate section title
pages, and page numbers.

Upload a digital copy of your Research Project PowerPoint presentation to the Blackboard site by **Friday, June
19th at Midnight**. This file should be separate from the notebook document.
Use the file naming convention: <YourLastName-TeamPartnerLastName-Presentation.doc>.
(Only one digital copy of the PowerPoint file needs to be uploaded for each team.

**Research Project Oral Presentations and Papers:**
Two-student teams will prepare a PowerPoint-format research report, make a **20 minute oral
presentation** to the class, and produce a paper on their research. Requirements for the
research project will be posted on the Blackboard site and will be discussed in class. **Provide
the instructor with a hardcopy of your team’s PowerPoint slides at the time of your**
presentation (print out the slides in the “handout format” with 6 slides per page).

Exams:
There will be a take-home final exam. The exam will be based on the in-class discussions. The final exam is due at the same time as the “Virtual Notebook” and should be included in the notebook as a separate section.

### Summer 2009 Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon, May  11</td>
<td>Introduction to Course; Group Discussion: &quot;Why study the history of construction?&quot;</td>
<td></td>
</tr>
<tr>
<td>Tues, May  12</td>
<td>Video # 1 and Discussion: &quot;The Brooklyn Bridge&quot;</td>
<td>Video # 1 and # 2 and Chapters 1 and 2 Reaction Papers Due By Midnight, Sun, May 17</td>
</tr>
<tr>
<td>Wed, May  13</td>
<td>Video # 2 and Discussion: &quot;This Old Pyramid&quot;</td>
<td></td>
</tr>
<tr>
<td>Thurs, May 14</td>
<td>Group Discussion: Profile of &quot;The Builder&quot;</td>
<td>Video # 3 and # 4 and Chapters 3, 4, and 5 Reaction Papers Due By Midnight, Sun, May 24</td>
</tr>
<tr>
<td>Mon, May 18</td>
<td>Video # 3 and Discussion: &quot;Roman City&quot;</td>
<td></td>
</tr>
<tr>
<td>Tues, May 19</td>
<td>Video # 4 and Discussion: &quot;Cathedrals&quot;</td>
<td></td>
</tr>
<tr>
<td>Wed, May 20</td>
<td>Group Discussion: Master Builders and the Evolution of Civilization and Cultures</td>
<td></td>
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<tr>
<td>Thurs, May 21</td>
<td>Field Research</td>
<td>Video # 5 and # 6 and Chapters 6, 7, and 8 Reaction Papers Due By Midnight, Sun, May 31</td>
</tr>
<tr>
<td>Mon, June 25</td>
<td>HOLIDAY: Memorial Day</td>
<td></td>
</tr>
<tr>
<td>Tues, June 2</td>
<td>Video # 5 and Discussion: &quot;Hoover Dam&quot;</td>
<td></td>
</tr>
<tr>
<td>Wed, June 3</td>
<td>Video # 6 and Discussion: &quot;The Golden Gate Bridge&quot;</td>
<td></td>
</tr>
<tr>
<td>Thurs, June 4</td>
<td>Group Discussion: Monumental Construction Projects</td>
<td>Video # 7 and # 8 and Chapters 9 and 10 Reaction Papers Due By Midnight, Sun, June 7</td>
</tr>
<tr>
<td>Mon, June 8</td>
<td>Video # 7 and Discussion: &quot;Skyscrapers&quot;</td>
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<tr>
<td>Tues, June 9</td>
<td>Video # 8 and Discussion: &quot;Why the Towers Fell&quot;</td>
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</tr>
<tr>
<td>Wed, June 5</td>
<td>Group Discussion: Learning from the Past and from Failures</td>
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<tr>
<td>Thurs, June 6</td>
<td>Field Research</td>
<td></td>
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<tr>
<td>Mon, June 7</td>
<td>Video # 9 and Discussion: &quot;Divided Highways&quot;</td>
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<tr>
<td>Tues, June 10</td>
<td>Video # 10 and Discussion: &quot;Making Sense of Place&quot;</td>
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</tr>
<tr>
<td>Wed, June 11</td>
<td>Group Disc: Cultural, Political, Economic,</td>
<td></td>
</tr>
</tbody>
</table>

Appendix B – Course Syllabi
<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thurs, June 11</td>
<td>Oral Presentations of Research Projects (4 groups)</td>
</tr>
<tr>
<td>Mon, June 15</td>
<td>Oral Presentations of Research Projects (4 groups)</td>
</tr>
<tr>
<td>Tues, June 16</td>
<td>Oral Presentations of Research Projects (4 groups)</td>
</tr>
<tr>
<td>Wed, June 17</td>
<td>Oral Presentations of Research Projects (4 groups)</td>
</tr>
<tr>
<td>Thurs, June 18</td>
<td>Oral Presentations of Research Projects (3 groups)</td>
</tr>
</tbody>
</table>
| Fri, June 19, midnight | Virtual Course Notebook Due  
(To include the Take Home Exam, research project paper, and all chapter and video reaction papers.) |

**Outline for Video Reaction Papers and Research Projects**

**Instructions:**
- Address the topics listed below in each of your video reaction papers and your team research project.
- Use this handout as a reference to refer to while watching each of the videos.
- This will help ensure that you take sufficient notes to write your reaction papers.
- Clearly label each reaction paper with your name, date, and title of the video.
- Video Reaction Papers should be a **minimum** length of 1 single-spaced (12-point-type) page. Use as much space as you need to completely discuss each topic.
- Each reaction paper must be uploaded to Blackboard by no later than the due date/time listed in the syllabus.
- No partial credit will be granted for late submissions. No exceptions.
- Upload paper to Blackboard using this file naming convention: `<YourLastName>_VideoName>.doc`

**Social Context**  
(e.g., religion, government, war, poverty, slavery, etc.)

**Political Context**  
(e.g., Did politics play a role? Who benefited? Is structure named for someone? Any scandals?, etc.)

**Economic Context**  
(e.g., motivation for the project, national/regional/local economic conditions at the time, etc.)

**Geographic Context**  
(e.g., why did they build it there?)

**Marketing and Promotion Issues**  
(e.g., How did the promoters market the project? Any scandals?, etc.)

**Financing Issues**  
(e.g., approach, cost, source of funds (private, taxes, etc.), Any scandals?)

**Management Issues**  
(e.g., characteristics of leadership style, management structure, risk management, Any scandals?, etc.)

**Labor Issues**  
(e.g., who were the laborers?, how many workers, wages, worker safety, etc.)

**Design Issues**  
(e.g., who designed it, describe the style, new or unique? awards?, iconic status?—if so, how/why?)

**Basic Statistics**  
(e.g., name(s) used over time, year built, how long to build, dimensions, cost)

**Technological Context and Challenges**

Appendix B – Course Syllabi
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(e.g., technology available/used, first to use new technology or methods of construction?, examples of creativity, etc.)

Construction Methods Used and Challenges
(e.g., describe methods, time to complete, challenges faced such as weather delays, examples of resourcefulness, etc.)

Materials Used
(e.g., major materials used, amounts, why those materials, transportation issues – local or imported?)

How long will this structure last and why?
BCN 3223 Soils and Foundations

BCN 3223-SOILS AND FOUNDATIONS-Section12810
Section Meets T R 3:05 PM – 4:20 PM Bldg 50 Room 1406

Professor: Dr. Roberto Soares, PhD, PE
Office: Building 50, Room 3130
Office Hours: TR 2 00-3:00PM -W 9:00-12:00AM
Direct Phone/Voice Mail: 620-2153
T R 9:30 AM-10:30 AM and by special appointment. Email: rsoares@unf.edu

COURSE REQUIREMENTS

Purpose and Objectives
This course covers construction operations and production processes associated with soils, demolition, foundations, concrete mix design, and earth moving equipment. The course also includes field visits, soil and concrete laboratories. (UNF Catalog)

Prerequisite: PHY 2054

Required Textbooks and Assignments: (1) Soils in Construction by Schroeder, Dickenson, Warrington - 5th Edition Prentice Hall (2) Handouts to complement textbook. There will be assignments from this text in class/take home. Students are encouraged to bring a calculator to the classroom to perform basic calculations. There will be periodic handouts in class for which the students will be whole responsible on examinations.

Special Accommodations
Students with disabilities who seek reasonable accommodations in the classroom or other aspects of performing their coursework must first register with the UNF Disability Resource Center (DRC) located in building 10, room 1201. DRC staff members work with students to obtain required documentation of disability and to identify appropriated accommodations as required by applicable disability laws including the Americans with Disabilities Act (ADA). After receiving all necessary documentation, the DRC staff determines whether a student qualifies for services with the DRC and, if so, the accommodations for the student will be provided. DRC staff then prepares a letter for the student to provide faculty advising them of approved accommodations.

Students expected Outcome
TO UNDERSTAND...
1. What “Soil Failure” is, and how to avoid it.
2. The Basic Mechanics of soil, and its properties.
3. How Water affects soil density, and soil strength.
4. The methods of Soil Investigations, and to be familiar with information in a Soils Report.
5. The Strength of Soils, and the variables that effect that strength.
6. The importance of Soil Compaction, and how it’s achieved.

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8. Rock excavation production and cost
9. Production of Aggregate, Concrete, and asphalt mixes
10. Buy or leasing decision

Class Attendance incentive: 10% of your grade will be increased in consideration of your perfect class attendance. 10% of your grade is a really significant component of your grade; it can boost your final grade up to the next grade level. To encourage this behavior, attendance will be taken every class section. Caution: Student caught signing for another will be dismissed from the course with zero and this fraud will be reported to academic affairs. Class attendance Department policy: You must to attend a minimum of 80% of the classes; otherwise you will receive a F grade on the course. (Spring Term: 5 absences=F) If you know you must miss a class for a legitimate medical, military, or judiciary reason, you may apply for an excused absent by supplying official documentation (e.g. s doctor’s note, judge/court document, military authorities signed document)

Examinations
There will be four examinations, pop quizzes, homework assignments and class assignments. All assignments must be turned in at the assigned due date to receive grade. Late assignments will not be accepted to receive grade.

Grading schedule

<table>
<thead>
<tr>
<th>Grade system</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100 %</td>
</tr>
<tr>
<td>B</td>
<td>80-89 %</td>
</tr>
<tr>
<td>C</td>
<td>70-79 %</td>
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<tr>
<td>D</td>
<td>60-69 %</td>
</tr>
<tr>
<td>F</td>
<td>59 and below</td>
</tr>
</tbody>
</table>

+ Attendance bonus 10% |

Possible Total 110%

Group Project: 4 student max/group
1- Excavators 2-Dozers and Loaders 3-Scrapers
4-Trucks and Hauling Equipment 5-digging Rock and Earth
6-Concrete Equipment 7-Soil dewatering equipment 8-Cranes and Clamshells
9-Piles and driving Equipment 10-Equipment Cost

COURSE SCHEDULE

<table>
<thead>
<tr>
<th>week</th>
<th>dates</th>
<th>subject</th>
<th>Text Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>1/5-9</td>
<td>Physical Character of Soil Constituents</td>
<td>Ch1</td>
</tr>
<tr>
<td>2nd</td>
<td>1/12-16</td>
<td>Natural Soil deposits</td>
<td>Ch2</td>
</tr>
<tr>
<td>3rd</td>
<td>1/19-23</td>
<td>Soil index Properties</td>
<td>Ch 3</td>
</tr>
<tr>
<td>4th</td>
<td>1/26-30</td>
<td>Soil Classification- Lab Assignment</td>
<td>Ch 4</td>
</tr>
<tr>
<td>5th</td>
<td>2/02-06</td>
<td>Soil Stress Analysis</td>
<td>Cp 5</td>
</tr>
<tr>
<td>6th</td>
<td>2/09-13</td>
<td>Interpretation of Soil Reports</td>
<td>Ch 7</td>
</tr>
</tbody>
</table>

Appendix B – Course Syllabi
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Topic</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th</td>
<td>2/16-20</td>
<td>Embankment Construction and Control</td>
<td>Ch 8</td>
</tr>
<tr>
<td>8th</td>
<td>2/23-27</td>
<td>Dewatering</td>
<td>Ch 9</td>
</tr>
<tr>
<td>9th</td>
<td>3/02-06</td>
<td>Excavations and Excavation Supports</td>
<td>Ch 10</td>
</tr>
<tr>
<td>10th</td>
<td>3/09-13</td>
<td>Foundation Construction</td>
<td>Ch 11</td>
</tr>
<tr>
<td>11th</td>
<td>3/16-20</td>
<td>Spring Break- No Classes- Enjoy!</td>
<td>--------</td>
</tr>
<tr>
<td>13th</td>
<td>3/30-4/3</td>
<td>Earthmoving Basics</td>
<td>Handout</td>
</tr>
<tr>
<td>14th</td>
<td>4/06-10</td>
<td>Group Project Presentation</td>
<td></td>
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<tr>
<td>15th</td>
<td>4/13-17</td>
<td>Group Project presentation</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>17-Last day of class</td>
<td></td>
</tr>
<tr>
<td>16th</td>
<td>12/8-12</td>
<td>Final examinations week</td>
<td></td>
</tr>
</tbody>
</table>

The above schedule, policies, and assignments in this course are subject to change in the event of extenuating circumstances or by mutual agreement between the instructor and the students.

**Academic Honesty:** UNF Policies and Procedures stipulated in the Student Conduct Code will constitute the main regulations determining the expected behavior and attitude. All course assignments are to be performed individually unless otherwise authorized by the instructor. No student shall receive, offer or give assistance not authorized by the professor in the preparation of any assignment.
BCN 3224 Construction Techniques

Adjunct Professor: Joe Varon PE
Office Bldg 50, Room 2010
Cell Tel. #: 718 0037
Home e-mail: devaron@comcast.net

Techniques II Superstructures
BCN 3224, Spring 09

Course Syllabus

Prerequisite: As stated in the catalog.

Course objectives: This course will enable students to get acquainted with systems and requirements of building superstructures. There is increasing demand for technically competent, informed construction managers and it is the goal of this course to contribute in the student’s education to meet these demands.

Specific goals: To understand the people involved in design and construction, their roles, responsibilities, interaction and how they communicate with each other. To become conversant in construction language. To understand the purpose and uses of construction materials and systems. To understand the way structures work, how forces are resisted and transferred and how materials and structural systems react to these forces. To understand the processes we use to set and achieve the quality goals we desire.


Exams: There will be two interim tests during the semester and a final exam. Final exam will be comprehensive. Questions will come from both the text and the class lecture topics. Each student is expected to attend all exams and be punctual.

Assignments: Assigned work is due on the specified date at the beginning of the class. Sometimes students may be asked to present a portion of their homework results to the class.

Attendance Policy:
Each student is expected to attend all class sessions and be punctual. Instructor may require attendance of on-line students for testing and special assignments.
Grading:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interim test # 1</td>
<td>25%</td>
</tr>
<tr>
<td>Interim test # 2</td>
<td>25%</td>
</tr>
<tr>
<td>Assigned work</td>
<td>20%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
</tbody>
</table>

A 90-100
B 80-89
C 70-79
D 60-69
F 59 and below

Lecture Topics: (approximate schedule)

1st week 
Course introduction and structural basics

2nd week
Concrete materials and reinforcing

3rd week
Cast-in-place concrete systems

4th week
Pre-cast concrete systems

5th week
Review and Test # 1

6th week
Discuss Test # 1

7th week
Steel materials and components

8th week
Steel connections

9th week
Steel framing systems

10th week
Review and Test # 2

11th week
Discuss Test # 2

12th week
Wood construction

13th week
Codes, fire protection

14th week
Ethics and quality

15th week
Review and final examination

Academic Honesty: University Policies and Procedures stipulated in the Student Conduct Code will constitute the main regulations determining the expected behavior and attitude.

All course assignments are to be performed individually unless otherwise authorized by the instructor. No student shall receive, offer or give assistance not authorized by the instructor in the preparation of any assignment.

Note:
The instructor reserves the right to make course content and schedule changes as deemed necessary and appropriate at any time during the academic quarter.
BCN 3611C Construction Cost Estimating

Course Syllabus - Summer B, 2009

Class Schedule
Lecture Classroom: Building 50, Room 1406
Lecture Class Periods: Monday, Tuesday, Wednesday, Thursday, 4:20 to 6:00 PM.

Contact Information
Instructor: John Dryden, Ph.D.
Office: Building 50, Room 2122
Office Hours: Monday/Wednesday/Friday 1:00-4:00 PM, Tuesday/Thursday by appointment. Open door policy.
Telephone: (O) (904) 620-2894
e-mail: j.dryden@unf.edu

Text and Project Materials:
The text for this course is *Construction Estimating using Excel* (Prentice Hall Co.) by Steven Peterson. This text is available in the bookstore. It may also be available via other sources, such as [http://www.half.com/](http://www.half.com/). Other class materials will be provided or will be available on the Web.

Course Scope

Course Description:
Classification of work, quantity survey techniques and basic estimating applied to simple construction projects.

Learning Objectives:
The general learning outcomes expected of students in this class are an understanding of the following topics:

- Read and interpret drawings and specifications.
- Identify the duties, responsibilities and risks associated with construction estimating.
- Recognize different types of estimates and their uses.
- Perform a quantity “takeoff”, i.e., providing lists of quantities of all the items of materials, equipment and labor necessary to complete an item of work, based on drawings and specifications.
- Use computer to assist in the preparation of the estimate.

Weekly Schedule:
This course focuses on the skills needed for accurate and efficient quantity surveying of construction materials, a vital requirement for a successful construction management career. Specifically, the topics that will be covered in this class are as follows:
### Week Topic Chapter(s) in Peterson Text

1. Introduction to Estimating Ch. 1, 2, 3  
2. Specifications, Sitework Ch. 4, 16  
3. Sitework continued Ch. 17, 18  
4. Concrete Ch. 5  
5. Concrete continued Ch. 5  
6. CMU Masonry Ch. 6  
7. Brick Masonry Ch. 6  
8. Steel, TEST #1 Ch. 7  
9. Wood Ch. 8  
10. Wood continued Ch. 8  
11. Thermal & Moisture Ch. 9  
12. Doors & Windows Ch. 10  
13. Finishes Ch. 11  
14. Plumbing, MEP Ch. 12, 13, 15  
15. HVAC, Review Ch. 14  
16. FINAL Ch. 8-15

### Grading

Your grade in this class will be determined by your performance in these areas:

Tests (Midterm, Final)  =  40%  

Takeoff Problem Sets  =  40%  

Homework, Quizzes  =  20%

Grading of any type of estimating assignment or test is inherently subjective. As in practice, it is **CRITICAL** that the grader be able to follow your work. This necessarily requires that calculations be well organized and legible. This also requires that drawings and specifications be referenced in order to show “where the numbers came from”. The more organized and legible the more likely the grader will give you the benefit of the doubt as to accuracy. Of course, appearance and organization must be supplemented with substance. The importance of following directions cannot be overstated. If there are questions regarding the directions given, ask the instructor.

### Homework

1. Assigned problem sets are due at the beginning of class on the date due.  
2. Late assignments will not be accepted and student will receive a zero on the assignment.  
3. All work turned in is expected to be of professional quality in content and presentation.  
4. Homework problems may be graded by detailed checking or based on overall attempt.  
5. Instructor may choose not to grade some homework.

### Quizzes, Make-up Tests

1. The Instructor reserves the right to give an announced quiz on any day.  
2. Students registered for the distance learning section must attend the mid-term and the final exam.  
3. No make-up tests will be given, unless arrangements are made prior to your absence.  
4. No make-up quizzes or in-class homework will be given.

### Other

1. A professional standard of conduct will be applied to classroom behavior and work quality. All work two or more pages shall be numbered and stapled.  
2. The professor reserves the right to modify, change, alter, eliminate, or increase the course requirements in order to meet the needs of the students. Any action taken by the professor must be done **IN GOOD FAITH** and with adequate notice.  
3. A working knowledge of Microsoft Excel® is a prerequisite for this course.

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Appendix B – Course Syllabi
BCN 3762 Building Design and Codes

Professor: Dr. Roberto Soares, PhD, PE
Office: Building 50, Room 3130
Office Hours: M W F 3:00PM-4:00PM,
Email: rsoares@unf.edu

Office: Building 50, Room 3130
Direct Phone/Voice Mail: 620-2153

COURSE REQUIREMENTS

Purpose and Objectives
Exploration of building design and construction that conform to federal, state, county, and Municipal codes, as well as the authority and responsibility vested in the several agencies. Research of the standard building codes required.

Prerequisite: BCN 1252

Required Textbooks and Assignments: 2007 Florida Building Code
There will be assignments from this text in class/take home. Students are encouraged to bring a calculator to the classroom to perform basic calculations. There will be periodic handouts in class for which the students will be whole responsible on examinations.

Special Accommodations
Students with disabilities who seek reasonable accommodations in the classroom or other aspects of performing their coursework must first register with the UNF Disability Resource Center (DRC) located in building 10, room 1201. DRC staff members work with students to obtain required documentation of disability and to identify appropriated accommodations as required by applicable disability laws including the Americans with Disabilities Act (ADA). After receiving all necessary documentation, the DRC staff determines whether a student qualifies for services with the DRC and, if so, the accommodations for the student will be provided. DRC staff then prepares a letter for the student to provide faculty advising them of approved accommodations.

Students expected Outcome
Following the successful completion of this course, students should be capable of identifying, defining and understanding the terms and concepts used in the construction field related with the subjects in study. Students should be able to search the 2007 Florida Building Code for regulations that apply to a design of a structure. Upon completion of a search, the student must be able to communicate that information in a written report.

Class Attendance incentive: 10% of your grade will be increased in consideration of your perfect class attendance. 10% of your grade is a really significant component of your grade; it can boost your final grade up to the next grade level. To encourage this behavior attendance will be taken every class section.

Class attendance Department policy: You must to attend a minimum of 80% of the classes; otherwise you will receive a F grade on the course. If you know you must miss a class for a legitimate medical, military, or judiciary reason, you may apply for an excused absent by supplying official documentation (e.g. a doctor’s note, judge/court document, military authorities signed document)

Examinations: There will be four examinations, pop quizzes, homework assignments and class assignments. All assignments must be turned in at the assigned due date to receive grade. Late assignments will not be accepted to receive grade, No make up for assignments, pop quizzes and class/ homework assignments.

Grading schedule

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Grade system</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 assignments @ 15% each</td>
<td>A 90-100 %</td>
</tr>
<tr>
<td>Pop quizzes</td>
<td>B 80-89 %</td>
</tr>
<tr>
<td>Class/homework assignments</td>
<td>C 70-79 %</td>
</tr>
<tr>
<td>Subtotal</td>
<td>D 60-69 %</td>
</tr>
<tr>
<td>Attendance bonus</td>
<td>F 59 and below</td>
</tr>
<tr>
<td>Possible Total</td>
<td>110%</td>
</tr>
</tbody>
</table>
Grade System

A: 90-100%; B: 80-89%; C: 70-79%; D: 60-69%; F: 59 % and below

Summer Special: This course has duration on 8 weeks with a delivery of total 40 hours of class time; each class duration is equal to 100 minutes of instruction which represents the double of time when compared with a regular semester class period. For this reason it is extremely important to HAVE PERFECT ATTENDANCE during the next 8 weeks of class. The expected material coverage average is 1.5 ch/class = 4.5 ch/week. TAKE ADVANTAGE OF THE 10 POINTS ON TOP OF YOUR FINAL GRADE by not missing any class. Attendance will be enforced.

Academic Honesty
UNF Policies and Procedures stipulated in the Student Conduct Code will constitute the main regulations determining the expected behavior and attitude. All course assignments are to be performed individually unless otherwise authorized by the instructor. No student shall receive, offer or give assistance not authorized by the professor in the preparation of any assignment.

BCN 3762-Building Construction Design and Codes Course Schedule

<table>
<thead>
<tr>
<th>May</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon, 11th</td>
<td>Summer A and C Begins</td>
</tr>
<tr>
<td>Wed, 13th</td>
<td>Last day students can add to waitlist</td>
</tr>
<tr>
<td>Fri, 15th</td>
<td>Deadline to add/drop for Summer A and C</td>
</tr>
<tr>
<td>Mon, 25th</td>
<td>Memorial Day</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>June</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fri, 5th</td>
<td>Deadline for withdrawal from Summer A (no refund)</td>
</tr>
<tr>
<td>Fri, 19th</td>
<td>Summer A Classes End</td>
</tr>
<tr>
<td>Tue, 23rd</td>
<td>Grade Input due for summer A classes (10am)</td>
</tr>
<tr>
<td>Wed, 24th</td>
<td>Summer B Classes Begin</td>
</tr>
<tr>
<td>Tue, 30th</td>
<td>Deadline to add/drop for Summer B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>July</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thu, 2nd</td>
<td>Deadline for Withdrawal Summer C (no refund)</td>
</tr>
<tr>
<td></td>
<td>summer C Classes end</td>
</tr>
<tr>
<td>Fri, 3rd</td>
<td>• Independence Day</td>
</tr>
</tbody>
</table>

We have 8 weeks of class; 2 holidays; We are going to meet 22 times; 29 chapters of the code will be covered (1-26,30,32,33); Minimum Required attendance to receive grade $22 \times 8 = 17.6 \rightarrow 18$ classes; No makeup availability.
BCN 3782 Introduction to Construction Computing

Spring 2009 Syllabus – Version 2

Instructor: J. David Lambert, Ph.D.; Email: jlambert@unf.edu
Course Times: 3:00 pm – 5:45 pm, Wednesday; Location: Building 50, Room 3124
Office Hours: 1:30 pm – 4:00 pm, Tues/Thurs, 50/3022; Required Text: No text is required.

Description: An introduction to current and evolving computing and electronic technologies that can be used to improve efficiency and effectiveness of construction project management.

Expected Outcomes: The student will gain:
- Knowledge of current and evolving technologies that may be utilized in the construction industry.
- Knowledge of the relevant terminology and the resources available to aid in make informed decisions about incorporating technology into field and office operations.
- Appreciation of the economic implications of incorporating new technologies in the construction workplace.
- Basic technical skills in new and evolving technologies.
- Practical skills related to using commonly available software to create professional documents and presentations.
- Exposure to construction industry professionals through conduct of the research project.
- Experience in working with others through team discussions and projects.
- Enhanced personal communication skills, both oral and written.
- Enhanced computer literacy demonstrated through the completion of the assignments and research project.

Evaluation and Grading: Points
Perfect On-time Attendance 50 See Course Policies
GIS Map Exercise (Individual) 50 (NO Credit if turned in late)
CAD / Internet Map Exercise (Individual) 50 (NO credit if turned in late)
Mobile Management Exercise (Individual) 50 (NO credit if turned in late)
Technology Vision Statement (Group Research Project)
Oral Presentation (PowerPoint) 100 (note: all group members must participate equally)
Written Report 150 (note: all group members get the same points)
Creating Effective Docs and Presentations (Group Project)
Oral Presentation (PowerPoint) 50 (note: all group members must participate equally)
Written Report 50 (note: all group members get the same points)
Technology Adoption Proposal (Group Research Project)
Oral Presentation (PowerPoint) 150 (note: all group members must participate equally)
Written Report 250 (note: all group members get the same points)
Take-Home Final Exam (Individual) 50
Total 1000 points (Final grades will use the plus/minus system).

Honor Code: Students are expected to comply with the spirit and intent of the University Academic Honesty Policy as stated in the Undergraduate Catalogue. Please see Undergraduate Student Handbook for all related policies and procedures. Any cheating on tests, plagiarism on papers or homework will result in immediate failure of the class.

Attendance Policy: CM Departmental Class Attendance Policy: “Attendance of BCM classes is mandatory. Students must attend 80% of all BCM classes in order to receive a passing
grade.” If you are going to miss class, you must notify the instructor in advance of the class by telephone or email to receive an “excused absence”. An “excused absence” will only be given for an illness or family emergency which is supported by written documentation. Attendance will be noted at the beginning of the class session. Three “late arrivals” will result in a reduction of one-half letter grade in the final course grade. Six or more “late arrivals” will result in a reduction of a full letter grade.

Assignment Policies: Upload digital copies of all assignments to the course Blackboard site according to the schedule listed below. Provide “Hardcopy” of the team PowerPoint slides and Project Papers to the instructor BEFORE each team project presentation (except for the final team project written paper, which is due during the final class session). Upload a digital copy of the “take-home” final exam to the Blackboard site by 5pm, April 15th. Provide a “hardcopy” of the “take-home” final exam during the final class session (April 15th). There will be no partial credit for late submissions.

Team Research Projects: Each student will be assigned to a 3-person research project team in order to complete three projects. All team members MUST participate in all aspects of the projects (don’t “split-the-work”). More details about the research project requirements will be discussed in class. Oral presentations must adhere to strict time requirements. (e.g., “Vision Statement” project oral presentation should be no less than 20 minutes and no more than 25 minutes long. Effective Docs/Presentations project oral presentation should be no less than 8 minutes and no more than 12 minutes long, and the final “Technology Adoption Proposal” project oral presentation should be no less than 25 minutes and no more than 30 minutes long. All students will be required to turn in a “Presentation Evaluation Form” for every team presentation.

**Spring 2009 Course Schedule (Version 1) (subject to update during the semester as needed)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Notes and Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wed, Jan 7</td>
<td>Course Introduction and Overview of Construction Computing</td>
<td></td>
</tr>
<tr>
<td>Wed, Jan 14</td>
<td>Introduction to Spatial Information Systems and GPS</td>
<td></td>
</tr>
<tr>
<td>Wed, Jan 21</td>
<td>GIS for Construction Project Management</td>
<td></td>
</tr>
<tr>
<td>Wed, Jan 28</td>
<td>Introduction to CAD and Internet Mapping Applications</td>
<td>Individual GIS Map Exercise (pdf format)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uploaded to BB by Tues, Jan 27, 5pm</td>
</tr>
<tr>
<td>Wed, Feb 4</td>
<td>Introduction to Mobile Computing Technologies</td>
<td>Individual CAD/Internet Map Exercise</td>
</tr>
<tr>
<td></td>
<td>and Team Research Project Assignment Discussion</td>
<td>Uploaded to BB by Tues, Feb 3, 5pm</td>
</tr>
<tr>
<td>Wed, Feb 11</td>
<td>Mobile Computing Field Exercise</td>
<td>Individual Mobile Computing Exercise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Uploaded to BB by Tues, Feb 10, 5pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Hardcopy” of PowerPoint and Papers due in class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Upload digital copies to BB BEFORE class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Student Evaluations)</td>
</tr>
<tr>
<td>Wed, Mar 4</td>
<td><strong>Team Presentation 1: Technology Vision Statement</strong></td>
<td>Teams 7 – 12: 20-minute Oral presentations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Hardcopy” of PowerPoint and Papers due in class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Upload digital copies to BB BEFORE class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Student Evaluations)</td>
</tr>
<tr>
<td>Wed, Mar 11</td>
<td>Creating Effective Documents and Presentation Materials</td>
<td></td>
</tr>
<tr>
<td>Wed, Mar 18</td>
<td><strong>Spring Break</strong></td>
<td></td>
</tr>
</tbody>
</table>

Appendix B – Course Syllabi
Technology Adoption Proposal” Project Guidelines and Group Assignments

Scenario

All three of Mr. Lambert’s construction companies (see the descriptions below) have been successful businesses for many years in the Northeast Florida region. All three companies have established an excellent reputation for quality and have a very experienced staff of professionals that have been with the companies for many years (i.e., they all know how to do their job very well—the way they have been doing it for years).

Unfortunately, none of these companies have kept up with all of the new technology that is available to increase efficiency and profits. They are using outdated business software and their computers are ancient. For example, they have many paper forms that they have been using for 20 years. You get the picture. It has finally become obvious to the management of each of these companies that they must adopt some new technology in all facets of the business, or, they will lose their competitive edge.

You and your team are the newest employees of the company (recent UNF BCM graduates). The CEO of the company has just given your team a very important assignment since he/she knows that, since you have just graduated from UNF, you probably know more than any other employee (“the old guard”) about which new technology should be adopted by the company.

Your boss has not given you much time to complete this assignment (see the deadline listed below for your company). You know that this is your chance to make a great “first impression”, so, you immediately start “surfing the web” for information and reviews on alternative business and project management software packages. You need to decide quickly which alternative products to recommend for your company based on the company profile. For example, a small custom home builder obviously does not need the same software and other technologies that a large heavy civil company needs.

Your future with the company depends on you doing thorough research, making the right choices, and presenting your recommendations in a professional manner (confident and knowledgeable about your selections, and clearly demonstrating the cost/benefit advantage to the company). In
fact, the future of the company may be in your hands. No pressure though.

**General Instructions for ALL teams**

Prepare a 25-30 minute PowerPoint presentation AND a written report to be presented to the CEO and other top management employees (in other words, you MUST make your presentation “playing the role”) in which you make recommendations for the adoption of appropriate technology that will increase efficiency, improve risk management practices, and increase profits.

1. **Upload a digital copy** of your team’s PowerPoint presentation to the “digital dropbox” before the class in which it will be presented. Upload a digital copy of your team’s Final Written Report no later than 3pm on April 15th.

2. Your report should include recommendations for software and hardware purchases, contracts with services (if appropriate, e.g., web-based, etc.), and other technologies, such as those that we learned about in the “technology vision” presentations in this course.

1. Include **software recommendations** for:
   1. Project Management
   2. Project Scheduling
   3. Project Estimating
   4. Business Management
   5. Accounting
   6. Human Resources

8. Provide comparisons between software alternatives as appropriate, or, at least make a very strong argument for choosing the software that you are recommending. Include cost estimates (FYI: Many times you will have to contact the company to get pricing—many websites do not list prices online). Include **computer hardware recommendations** only if it relates to special technologies such as GPS, mobile computing (handhelds, etc.), RFID systems, vehicle-mounted systems, etc. Include unit/total costs of those types of systems, if you recommend them. You do not have to provide detail or cost estimates for the desktop computers, servers, etc. that will be needed to support the project or business management software. Be sure to make strong arguments for the cost/benefit advantages of any special technology recommended.

**TEAM ASSIGNMENTS AND PRESENTATION DATES**

**Group A – “Lambert Custom Homes”**
- Oral/PowerPoint Presentation Date: Wednesday, April 1
- Teams Assigned: (1) Kirk, Campbell, Connell; (4) Paschall, Lamb, Dunmire; (7) Guinn, Graves, Howell.
- Company Profile: A local custom home builder who builds about 20 “high-end” residences each year. Use as an example of this type of company: Steve Johnson Builders, Inc. (http://www.stevejohnsonbuilders.com)

**Group B – “Lambert Commercial Construction”**
- Oral/PowerPoint Presentation Date: Wednesday, April 8
- Teams Assigned: (2) Blair, Sparrow, Angelo; (5) Ennis, Crawford, Brown; (8) Hundley, Engwall, Barrett; (10) Koopman, Ly, Shieffling.
- Company Profile: Medium-size, regional construction company specializing in Design/Build and Construction Management Services for commercial and institutional building projects. Use as an example of this type of company: Elkins Constructors(http://www.elkinsconstructors.com/)

**Group C – “Lambert Heavy Civil Construction”**
- Oral/PowerPoint Presentation Date: Wednesday, April 15
- Teams Assigned: (3) Shepard, Rodriguez, Stewart; (6) Hartley, Seaton, Rosales; (9) Flight, Miley, Burrough; (11) Powell, DeBoer, Shouppe.
- Company Profile: Medium-size, regional construction company specializing in heavy civil construction projects. Use as an example of this type of company:
Chapter 4  
Equilibrium of Coplanar Force Systems (Review)

Chapter 9  
Stresses and Strain

  9-1&9-2  Tension, Compression, and Bearing Stresses
  9.3    Shear Stresses
  9.4    Tensile and Compressive Strain and Deformation
  9.5    Relation Between Stress and Strain (Hooke’s Law)

Chapter 11  
Stress Concentrations

  11.1    Poisson’s Ratio
  11.2    Thermal Effects
  11.3    Members Composed of Two or More Materials

Chapter 12  
Torsion in Circular Members

  12-1&12-2  Torsion Members
  12.3    Torsional Shear Stress
  12.4    Angle of Twist (Torsional Deformation)

Chapter 13  
Shear and Bending Moment in Beams

  13-1, 13-2, 13-3    Beam Supports, Loads and Reactions
  13.4    Shear Force and Bending Moment
  13-5&13-6    Shear and Bending Moment Diagrams
  13.7    Maximum Shear and Moments

Chapter 14  
Stresses in Beams

  14-1, 14-2, 14-3    Computation of Tension and Compression Bending Stresses Using the Flexure Formula
  14-4, 14-5, 14-6    Computation of Shear Stresses Using the General Shear Formula

Chapter 18  
Columns

  18-1, 18-2, 18-3    Ideal Columns and Effective Length
  18-4, 18-5    Real Columns and Allowable Column Stresses
  18.6    Axially Loaded Structural Steel Columns Using AISC

Exams: Each exam is 25% of your total grade.

Exam 1    January 28, 2009
Exam 2    February 25, 2009
Exam 3    March 25, 2009
Final Exam  As Scheduled
Attendance: Roll is taken at the start of each class. If you are not present during roll, you will be considered absent, regardless of whether you show up. Six (6) absences are permitted during the semester. The seventh absence will cause you to fail the course.

Cell phone policy: Cell phones must be turned off. Receiving and sending of text messages/calls during class is strictly prohibited and is grounds for confiscation and destruction of your phone.

Exam Policy: Students are permitted one (1) 8.5”x11” formula sheet. Handwritten items are the only items permitted. Any solution(s) that I may provide are strictly prohibited from being copied to your formula sheet. Use of any other aid or violation of the above policy will result in failure of the class.
BCN 4591C Mechanical and Electrical Systems

Professor: Dr. Roberto Soares, PhD, PE  
Office: Building 50, Room 3130  
Office Hours: TR 2 00-3:00PM –W 9:00-12:00AM  
T R 9:30 AM-10:30 AM and by special appointment.  
Email: rsoares@unf.edu  

Office: Building 50, Room 3130  
Direct Phone/Voice Mail: 620-2153  

COURSE REQUIREMENTS

Purpose and Objectives
This course introduces students to the principles and current practices in application of mechanical & electrical system as described in divisions 14 (conveying equipment), 15 (mechanical systems), and 16 (electrical systems) in the Construction Specifications Institute (CSI). (UNF Catalog)

Prerequisite:  PHY 2054

Required Textbooks and Assignments: (1) Janis & Tao, 4th Edition –Mechanical and Electrical Systems in Buildings Prentice Hall (2) Handouts to complement textbook.
There will be assignments from this text in class/take home. Students are encouraged to bring a calculator to the classroom to perform basic calculations. There will be periodic handouts in class for which the students will be whole responsible on examinations.

Special Accommodations
Students with disabilities who seek reasonable accommodations in the classroom or other aspects of performing their coursework must first register with the UNF Disability Resource Center (DRC) located in building 10, room 1201. DRC staff members work with students to obtain required documentation of disability and to identify appropriated accommodations as required by applicable disability laws including the Americans with Disabilities Act (ADA). After receiving all necessary documentation, the DRC staff determines whether a student qualifies for services with the DRC and, if so, the accommodations for the student will be provided. DRC staff then prepares a letter for the student to provide faculty advising them of approved accommodations.

Students expected Outcome
Following the successful completion of this course, students should be capable of identifying, defining and understanding the terms and concepts used in the construction field related with the subjects in study. Students should be able:

Mechanical (CSI division 15):
Distinguish the basic influence of energy on buildings.
Identify the influences of indoor climate on human comfort in building
Identify localized outdoor climate on human comfort in buildings.
Distinguish the nature of heat flow both within the building indoor and through the building envelop.
Calculate the quantity of heat exchange required for maintaining human comfort within buildings.

Compare the methods for providing the necessary heat exchange appropriate for building conditions.

Distinguish the means for transporting throughout a building the medium required to facilitate the exchange.

Plumbing: (CSI division 15)___

Distinguish the basic influences of water for buildings

Identify the methods for acquiring, processing, and distributing domestic water for buildings.
Identify the methods for collecting, processing, and distributing domestic liquid waste for buildings.

Electrical: (CSI division 16)

Solve simple electrical resistance, power and energy problems.

Distinguish various service entrance systems.

Identify common conductor and raceway systems.

Identify miscellaneous electrical power equipment component.

Identify the national electrical code.

Distinguish various lighting types.

Design simple lighting systems for buildings.

Conveying Systems (CSI division 14)

Identify different types of elevators, chutes and pneumatic tube systems.

Class Attendance incentive: 10% of your grade will be increased in consideration of your perfect class attendance. 10% of your grade is a really significant component of your grade; it can boost your final grade up to the next grade level. To encourage this behavior attendance will be taken every class section. Caution: Student caught signing for another will be dismissed from the course with zero and this fraud will be reported to academic affairs.

Class attendance Department policy: You must to attend a minimum of 80% of the classes; otherwise you will receive a F grade on the course. (Spring Term: 5 absences=F) If you know you must miss a class for a legitimate medical, military, or judiciary reason, you may apply for an excused absent by supplying official documentation (e.g. s doctor’s note, judge/court document, military authorities signed document)

Examinations

There will be four examinations, pop quizzes, homework assignments and class assignments. All assignments must be turned in at the assigned due date to receive grade. Late assignments will not be accepted to receive grade.

Grading schedule

<table>
<thead>
<tr>
<th>Grading schedule</th>
<th>Grade system</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 assignments @ 15% each</td>
<td>A 90-100 %</td>
</tr>
<tr>
<td>Pop quizzes</td>
<td>B 80-89 %</td>
</tr>
<tr>
<td>Class/homework assignments</td>
<td>C 70-79 %</td>
</tr>
<tr>
<td>Subtotal</td>
<td>D 60-69 %</td>
</tr>
<tr>
<td>+ Attendance bonus</td>
<td>F 59 and below</td>
</tr>
<tr>
<td>Possible Total</td>
<td></td>
</tr>
<tr>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

Possible Total 110%

Appendix B – Course Syllabi
### COURSE SCHEDULE

<table>
<thead>
<tr>
<th>week</th>
<th>dates</th>
<th>subject</th>
<th>Text Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>1/5-9</td>
<td>Introduction to MES, energy, sustainability, economics. Note: 09 last day to drop-add</td>
<td>Ch 1</td>
</tr>
<tr>
<td>2nd</td>
<td>1/12-16</td>
<td>HVAC Fundamentals</td>
<td>Ch 2</td>
</tr>
<tr>
<td>3rd</td>
<td>1/19-23</td>
<td>HVAC Fundamentals, HVAC delivery Systems</td>
<td>Ch 2, Ch3</td>
</tr>
<tr>
<td>4th</td>
<td>1/26-30</td>
<td>Cooling Production Equipment and Systems</td>
<td>Ch 4</td>
</tr>
<tr>
<td>5th</td>
<td>2/02-06</td>
<td>Heating Production and Systems</td>
<td>Ch 5</td>
</tr>
<tr>
<td>6th</td>
<td>2/09-13</td>
<td>AHU- Air Handling Units and Systems</td>
<td>Ch 6</td>
</tr>
<tr>
<td>7th</td>
<td>2/16-20</td>
<td>Piping Equipment and Systems</td>
<td>Ch 7</td>
</tr>
<tr>
<td>8th</td>
<td>2/23-27</td>
<td>Plumbing Equipments and Systems</td>
<td>Ch 8</td>
</tr>
<tr>
<td>9th</td>
<td>3/02-06</td>
<td>Fire Protection Equipment and Systems</td>
<td>Ch 9</td>
</tr>
<tr>
<td>10th</td>
<td>3/09-13</td>
<td>Introduction to Electricity</td>
<td>Ch 10</td>
</tr>
<tr>
<td>11th</td>
<td>3/16-20</td>
<td>Spring Break- No Classes- Enjoy!</td>
<td></td>
</tr>
<tr>
<td>13th</td>
<td>3/30-4/3</td>
<td>Electrical Design and Wiring</td>
<td>Ch 13</td>
</tr>
<tr>
<td>14th</td>
<td>4/06-10</td>
<td>Overview for Light and Lighting</td>
<td>Ch 14, 16</td>
</tr>
<tr>
<td>15th</td>
<td>4/13-17</td>
<td>Noise and Vibrations in Mechanical Systems</td>
<td>Ch 18</td>
</tr>
<tr>
<td>16th</td>
<td>12/8-12</td>
<td>Final examinations week</td>
<td></td>
</tr>
</tbody>
</table>

The above schedule, policies, and assignments in this course are subject to change in the event of extenuating circumstances or by mutual agreement between the instructor and the students.

**Academic Honesty**

UNF Policies and Procedures stipulated in the Student Conduct Code will constitute the main regulations determining the expected behavior and attitude. All course assignments are to be performed individually unless otherwise authorized by the instructor. No student shall receive, offer or give assistance not authorized by the professor in the preparation of any assignment.
BCN 4612 Advanced Cost Estimating

Course Syllabus - Spring Semester 2009

**Prerequisites:** BCN 3611C

**Class Schedule**
Lecture Classroom: Building 50, Room 3104
Lecture Class Periods: Monday and Wednesday, 3:00 to 4:15 PM.

**Contact Information**
Instructor: John Dryden, Ph.D.
Office: Building 50, Room 2122
Office Hours: Tuesdays and Thursdays 12:00-1:30; Wednesdays 11:30-1:30; by appointment. Open door policy.
Telephone: (O) (904) 620-2894
e-mail: j.dryden@unf.edu

**Course Description:** Advanced techniques for estimating building construction. This course includes direct and indirect cost analysis for complicated construction systems; preparation of bid proposals, specifications, and other related documents. Students will be required to do projects using Excel spreadsheets.

**Learning Objectives:** The general learning outcomes expected of students in this class are an understanding of the following topics:

- Read and interpret drawings and specifications.
- Perform a quantity “takeoff”, i.e., providing lists of quantities of all the items of materials, equipment and labor necessary to complete an item of work, based on drawings and specifications.
- Analysis and determination of cost of construction operations including applicable indirect and overhead costs such as construction projects. Elements of Labor, equipment, project overhead, general overhead, markup, general conditions, crew sizing, location differential, and bonding costs.
- Use published cost data (RS Means) to assist in the preparation of the estimate.
- Construction estimating software for estimating.
- Value Engineering.
- Bidding strategy.
- Ethics in estimating.
Text and Project Materials:

Construction Estimating: An Accounting and Productivity Approach, Second Edition, by James J. Adrian, which is available in the bookstore. Other class materials will be provided or will be available on the Web.

Grading

Your grade in this class will be determined by your performance in these areas:

- Tests (#1, Final) = 30%
- Takeoff Problem Sets = 35%
- Bid Day Project = 15%
- Quizzes, Homework = 20%

Grading of any type of estimating assignment or test is inherently subjective. As in practice, it is CRITICAL that the grader be able to follow your work. This necessarily requires that calculations be well organized and legible. This also requires that drawings and specifications be referenced in order to show “where the numbers came from”. The more organized and legible the more likely the grader will give you the benefit of the doubt as to accuracy. Of course, appearance and organization must be supplemented with substance.

Takeoff Sets/Homeework

1. Assigned problem sets are due at the beginning of class on the date due.
2. Late assignments will not be accepted and student will receive a zero on the assignment.
3. All work turned in is expected to be of professional quality in content and presentation.
4. Homework problems may be graded by detailed checking or based on overall attempt.
5. Instructor may choose not to grade some homework.

Quizzes, Make-up Tests

1. The Instructor reserves the right to give a quiz on any day.
2. No make-up tests will be given, unless arrangements are made prior to your absence. 3. No make-up quizzes or homework will be given.

Other

1. A professional standard of conduct will be applied to classroom behavior and work quality. All work two or more pages shall be stapled.
2. The professor reserves the right to modify, change, alter, eliminate, or increase the course requirements in order to meet the needs of the students. Any action taken by the professor must be done IN GOOD FAITH and with adequate notice.
BCN 4708 Documents and Contracts

Professor: Dr. Carol Woodson

Contact Info: Office Hours: After class and by appointment. Email to make an appointment.  
c.woodson@unf.edu
Office phone: 904-620-2746 Office: 2114 Building 50

Meeting Periods: 10:50am to 12:05 Tuesday and Thursday

Course Description: (from catalog) A study of the legal and protective documentation used in the construction field. These documents include contracts, specifications, insurance, and bonds.

Prerequisites: BUL 3130

Objectives: To expose the students to basic concepts of Construction Contracts and Documents.
To familiarize students with the basic contracts used in the construction field
To acquaint students with the various types of company structures.
To explore and discuss ethics in construction as it pertains to contracts and documents
To examine documents pertaining to project management
To familiarize students with the types of insurance and bonds used in the construction industry.
To examine the concepts of risk management as it pertains to contracts and documents used in construction
To explore project management/administration concepts in executing contracts
To acquaint students with current labor laws and labor relations
To examine contract claims and disputes


Method: Lecture/discussion classes and reading assignments. Open class discussion is an important element of this class, voluntarily or involuntarily. Students are responsible for the content of all reading assignments whether or not the material is covered in class. Reading assignments should be done before the class in which they are discussed. Instructor will give out handouts and/or invite guest speakers from the construction industry periodically to supplement the text; you are responsible for the content of both. Lecture material will augment reading assignments.

Tests: There will be four tests given with test 4 being the final. Test results must be discussed with the instructor within 48 hours after the test has been graded and reviewed. Makeup tests will NOT be given for unexcused absences.

Outcomes & Assessment: Final grades will be based on the following:
Each homework assignment, research paper or test is worth 100 points. The content of these will be structured to meet the objectives for this course. The total number of points earned at the end of the semester will be divided by the total sum of assignments, papers and tests given, to produce your final grade.
Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93.100</td>
</tr>
<tr>
<td>A-</td>
<td>89-92</td>
</tr>
<tr>
<td>B+</td>
<td>86-88</td>
</tr>
<tr>
<td>B</td>
<td>83-85</td>
</tr>
<tr>
<td>B-</td>
<td>79-82</td>
</tr>
<tr>
<td>C+</td>
<td>76-78</td>
</tr>
<tr>
<td>C</td>
<td>69-75</td>
</tr>
<tr>
<td>D</td>
<td>60-68</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
</tr>
</tbody>
</table>

Attendance/Conduct: You have the responsibility to be here for class. I have the responsibility to make the class interesting, relevant, and challenging. Please contact me before the class if you are ill and cannot attend a class in order to be excused. It is the policy of the Construction Management department that students must attend 80% of the classes, it will be enforced. You are only allowed 6 unexcused absences. You are not permitted to enter the class late. It is rude and disruptive to me and your fellow classmates. Be here on time. Students will conduct themselves in a professional and respectful manner at all times. Failure to do so will result in the removal from the class. **Do not ask me to accept your assignments late or to give you a grade you did not earn, it is not negotiable.** Turn your cell phones off and put them away while in class. You may use your laptop to take notes only, no emailing or surfing the net while in class.

Assignments: There will be 4 assignments given throughout the semester in the manner of homework and/or papers. Assignments and due dates/time will be posted on Blackboard. This course is registered in Blackboard. Check Blackboard daily for announcements, assignments, etc. **All assignments will be individual. No collaborating on any assignments! Do your own work! This class does not do group projects. It is structured to determine how well you think and work on your own.** All work is to be presented in a professional manner.

***WORK WILL NOT BE ACCEPTED LATE FOR ANY REASON***

Honor Code: Students are expected to comply with the spirit and intent of the University Academic Honesty Policy as stated in the Undergraduate Catalogue. Please see Undergraduate Student Handbook for all related policies and procedures. Any cheating, collaborating, or plagiarism on tests, papers or homework will result in the immediate failure of the class. Do your own work!

Course Schedule:

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Reading Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week #1</td>
<td>The Construction Industry</td>
<td>Chap 1</td>
</tr>
<tr>
<td>Week #2</td>
<td>Business Ownership/Ethics</td>
<td>Chap 2</td>
</tr>
<tr>
<td>Week #3</td>
<td>Company Organizations</td>
<td>Chap 3</td>
</tr>
<tr>
<td>Week #4</td>
<td>Continuation of Co. Org.</td>
<td>Chap 4</td>
</tr>
<tr>
<td>Week #5</td>
<td>Drawings and Specifications/Bidding Docs</td>
<td></td>
</tr>
<tr>
<td>Week #6</td>
<td>Construction Contracts/ Risk and Liability</td>
<td>Chap 6</td>
</tr>
<tr>
<td>Week #7</td>
<td>Contract Surety Bonds</td>
<td>Chap 7</td>
</tr>
<tr>
<td>Week #8</td>
<td>Construction Insurance</td>
<td>Chap 8</td>
</tr>
<tr>
<td>Week #9</td>
<td>Business Methods/Project Management</td>
<td>Chap 9</td>
</tr>
<tr>
<td>Week #10</td>
<td>Project Management/Administration</td>
<td>Chap 10</td>
</tr>
<tr>
<td>Week #11</td>
<td>Continued</td>
<td></td>
</tr>
<tr>
<td>Week #12</td>
<td>Project Time Management</td>
<td>Chap 11</td>
</tr>
</tbody>
</table>
Week #13  Project Cost Management  Chap 12
Week #14  Labor Law  Chap 13
Week #15  Labor Relations/Claims and Disputes  Chap 14

Professor reserves the right to alter the syllabus as necessary to execute the course. You will be notified in class if this happens in order to amend your syllabus.
BCN 4709 Construction Project Management Capstone
Course Syllabus - Spring Semester 2009

Corequisite: BCN 4931

Class Schedule
Lecture Classroom: Building 39A, Room 1034; Several class meetings on-site at Alden Road Exceptional School on Alden Road in Jacksonville, Florida.
Lecture Class Periods: Tuesday and Thursday, 3:05 to 4:20 PM. NOTE: Owner Design Reviews and Proposal Presentations will likely extend past 4:20 PM.

Contact Information
Instructor: John Dryden, Ph.D.
Office: Building 50, Room 2122
Office Hours: Tuesdays and Thursdays 12:00-1:30; Wednesdays 11:30-1:30; by appointment. Open door policy.
Telephone: (O) (904) 620-2894
e-mail: j.dryden@unf.edu

Course Scope
Course Description: This three credit-hour course is a senior capstone experience, providing an opportunity for students to control and coordinate construction projects and personnel in a service learning environment. Students will apply their knowledge and skills in strategic bidding and estimating, ethical conduct, project delivery methods, value engineering, design/build, and customer relations and communication

Learning Objectives: This course is a senior capstone experience where students will:
Control and coordinate an actual design/construction project in a service learning environment.

Apply their knowledge in strategic bidding and estimating.

Execute proper project delivery, value engineering, client relation-building, and professional written and oral communication tools and methods learned throughout their university education.

Attendance Policy:
Roll will be taken every class. It is expected that students are punctual to class. Based on departmental policy, students are required to attend all classes and an 80% attendance level is the minimum accepted. Absences exceeding the allowed amount will automatically result in the lowering of the course grade by 1 full letter grade.

Text and Project Materials:
Class materials will be provided or will be available on the Web or at the UNF library.
Grading

Groups of exactly 4 (four) students shall be formed. As shown on the Semester Outline, there are approximately 12 major weekly project evolutions due. These project evolutions will be worth a total of 65% of the course grade. These evolutions shall be submitted either an individual (one unique submission per individual) or group assignment (one submission per group), according to the professors specific instructions for that evolution.

There will be exactly 8 (eight) quizzes given over the course of the semester. These quizzes shall cover any preceding course material either covered in lecture or in assigned readings since the last quiz. Exactly 2 (two) of the lowest quiz grades will be dropped automatically. The remaining quizzes will be worth a total of 20%.

The final proposal booklet and presentation will be worth 15% of the course grade. Evaluation criteria of the final proposal work will be given in class.

IMPORTANT: In order for a student to receive a passing grade in this course, he or she must sit for either the AIC Associate Exam or the state of Florida General Contractor Exam.

NOTE: The application for the AIC exam must be postmarked by February 1, 2009. A copy of the AIC exam application can be found on the course Blackboard site, under “Course Documents”. This exam is taken in lieu of a course final exam.

Quizzes

1. The Instructor reserves the right to give a quiz on any day.
2. No make-up quizzes will be given, unless arrangements are made prior to your absence.
3. No make-up quizzes will be given.

Other

1. A professional standard of conduct will be applied to classroom behavior and work quality. All work two or more pages shall be stapled.
2. The professor reserves the right to modify, change, alter, eliminate, or increase the course requirements in order to meet the needs of the students. Any action taken by the professor must be done IN GOOD FAITH and with adequate notice.

Schedule Subject to Change

<table>
<thead>
<tr>
<th>Week#</th>
<th>SUBJECT</th>
<th>Notable Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 – Jan 6</td>
<td>Syllabus Intro Lecture</td>
<td>Term Project introduced</td>
</tr>
<tr>
<td>#2- Jan 13</td>
<td>Starting a Construction Company Presenter: Business Support Inc.</td>
<td>RFQ, RFP introduced</td>
</tr>
<tr>
<td>#3- Jan 20</td>
<td>Planning for Owner Design Review Presenter: Jack Diamond</td>
<td>Statement of company qualifications, AIA Documents due</td>
</tr>
<tr>
<td>#4- Jan 29</td>
<td>Owner Design Review #1 Presenter: Alden Road school staff, PTA and students</td>
<td>Conceptual Estimate, Project Sketches due</td>
</tr>
<tr>
<td>#5- Feb 3</td>
<td>Permitting Presenter: Andy Eckert / Kris Eskelin</td>
<td>Design review meeting minutes,</td>
</tr>
<tr>
<td>#6 – Feb 10</td>
<td>Contract Review-AIA documents Presenter: Tony Zebouni</td>
<td>Contract clarifications, site use documents due</td>
</tr>
<tr>
<td>#7 – Feb 19</td>
<td>Owner Design Review #2 Presenter: Alden Road school staff, PTA and students</td>
<td>AIA documents due Construction schematics and site plan given to groups prior to this class</td>
</tr>
</tbody>
</table>

Appendix B – Course Syllabi
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Presenter/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>#8 – Feb 24</td>
<td>Scope Description</td>
<td>Design review meeting minutes, C/O due</td>
</tr>
<tr>
<td></td>
<td>Presenter: Jack Diamond</td>
<td></td>
</tr>
<tr>
<td>#9 – Mar 3</td>
<td>Estimating</td>
<td>TBD – <em>(Andy to request Auld&amp;White CM to present)</em></td>
</tr>
<tr>
<td></td>
<td>Presenter: Timberline demo (?), Master</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Builder demo (?)</td>
<td></td>
</tr>
<tr>
<td>#10-Mar 10</td>
<td>Scheduling: John Dryden</td>
<td>Detailed project estimate due</td>
</tr>
<tr>
<td></td>
<td>P3, S-curves, updating</td>
<td></td>
</tr>
<tr>
<td>Mar 16</td>
<td><strong>SPRING BREAK</strong></td>
<td></td>
</tr>
<tr>
<td>#11-Mar 24</td>
<td>Project Admin/Project Closeout</td>
<td>Cost-loaded project schedule due</td>
</tr>
<tr>
<td></td>
<td>Presenter: DCSB Construction Admin.</td>
<td></td>
</tr>
<tr>
<td>#12-Mar 31</td>
<td>Project Financing</td>
<td>Request for Substantial Completion, Payment Request, Lien Release(s) due</td>
</tr>
<tr>
<td></td>
<td>Presenter: People’s 1st/Tim New, R. Sutton</td>
<td></td>
</tr>
<tr>
<td>#13- April 7</td>
<td>Insurance, bonds, lien release</td>
<td>L.O.C. Analysis</td>
</tr>
<tr>
<td></td>
<td>Presenter: C&amp;D Bonds &amp; Ins/Carol Hopson</td>
<td></td>
</tr>
<tr>
<td>#14- April 14</td>
<td>Proposal Presentations (8 min. + 2 min. quest.)</td>
<td>Proposal booklet and presentation</td>
</tr>
<tr>
<td></td>
<td>and 16</td>
<td></td>
</tr>
<tr>
<td>#15- April 21</td>
<td>Final Exam Scheduled – 3:00 PM</td>
<td></td>
</tr>
</tbody>
</table>
BCN 4720 Construction Project Planning and Scheduling

SPRING 2009

Course: BCN 4720 - Construction Project Planning and Scheduling
Prerequisite: BCN 3611 - Construction Cost Estimating; BCN 3782 - Intro to Construction Computing
Instructor: Erin A. Jiang, Ph.D., CPC
Email: a.jiang@unf.edu
Office: 50-2120
Office Hours: T R 2:00PM – 4:00PM
Meeting Time and Location: T R 12:15PM – 1:30PM
Credits: 3 credits
Text: Construction Project Scheduling and Control, by Saleh Mubarak, Pearson Prentice Hall;
Software: P6 $35.00
Reference: 1. Construction Scheduling with Primavera Project Planner, By David A. Marchman, Delmar Publishers,
2. Means Construction Cost Data, R.S.Means;

Course Description: Fundamentals and techniques of scheduling and planning for construction projects. Topics include bar charts, Critical Path Method using, both arrow and precedence networks, CPM calculations, cost-time trade off, PERT, resource leveling, and updating schedules during construction. Students will be introduced to the use of scheduling software.

Course Objectives:
This course will enable students to:
1. Understand the concept of scheduling and its benefits and impact on construction projects.
2. Prepare and interpret bar (Gantt) charts.
3. Understand the Critical Path Method and make CPM calculations.
4. Prepare and interpret precedence diagrams.
5. Realize the trade-off between time and resource allocation in scheduling.
6. Update the schedule during project implementation.
7. Perform resource leveling throughout the project time.
8. Apply the scheduling concepts using available scheduling software.

Course Outcomes:
After studying project construction planning and scheduling, students are expected to be able to use the following methods to plan, schedule, and update construction projects:
• Bar Chart Scheduling Method
• Development of Basic Network
• Critical Path Method
• Precedence Diagram
• Resource Allocation and Resource Leveling
Students are also expected to be able to analyze trade-offs between time and cost, efficiently present project schedule. Finally, students are expected to be able to use available scheduling software, and to apply their scheduling knowledge to solve real project scheduling problems.

Appendix B – Course Syllabi
Grading:

Exam 1 15%
Exam 2 15%
Exam 3 15%
Homework, class exercises & quizzes 20%
Projects 20%
Presentation 5%
Attendance and participation 10%
Total 100%

Grading Scale

A 90 - 100
A- 88 - 89
B+ 85 - 87
B 80 - 84
B- 78 - 79
C+ 75 - 77
C 70 - 74
D 60 - 69
F 0 - 59

Attendance policy: Each student is expected to attend all class sessions and be punctual. Regular attendance influences attendance and participation grade. **80% of attendance is required to pass this class.**

Class policy: 1. Usage of cell phone in class is prohibited. Please turn your cell phone off before you step into the class.
2. Submit required assignments on time. **Any late submission would be 10% off the original grade per calendar day. Submission is NOT accepted later than five calendar days. Students are responsible for getting your assignments back on time.**

Academic Honesty: University Policies and Procedures stipulated in the Student Conduct Code will constitute the main regulations determining the expected behavior and attitude. All course assignments are to be performed individually unless otherwise authorized by the instructor. No student shall receive, offer or give assistance not authorized by the professor in the preparation of any assignment.

Course Outline

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPICS</th>
<th>ASSIGNMENT MILESTONES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 6</td>
<td>Course Outline Introduction</td>
<td>Read: Chapter 1</td>
</tr>
<tr>
<td></td>
<td>Jan 8</td>
<td>Bar (Gantt) Chart</td>
<td>Read: Chapter 2</td>
</tr>
<tr>
<td></td>
<td>Jan 13</td>
<td>Basic Networks</td>
<td>Read: Chapter 3</td>
</tr>
</tbody>
</table>
|      | Jan 15 | Basic Networks | **presentation 1**
|      |       | | How to develop construction schedule |
| 2    | Jan 20 | Critical Path Method | Read: Chapter 4 |
|      | Jan 22 | Critical Path Method | **presentation 2**
|      |       | | Building garage |
| 3    | Jan 27 | Critical Path Method | Read: Chapter 4 |
|      | Jan 29 | **Tutorial 1** | **presentation 3**
|      |       | | Install vinyl siding |
| 4    | Feb 3 | | **presentation 4**
|      |       | | Roof construction |

Appendix B – Course Syllabi
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb 5</td>
<td>Exam 1</td>
<td></td>
</tr>
<tr>
<td>Feb 10</td>
<td>Work Breakdown Structure</td>
<td>Read: Chapter 5</td>
</tr>
<tr>
<td>Feb 12</td>
<td>Introduce Term Project</td>
<td>presentation 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Install suspended ceiling</td>
</tr>
<tr>
<td>Feb 17</td>
<td>Tutorial 2</td>
<td>presentation 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wall paper</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WBS Due</td>
</tr>
<tr>
<td>Feb 19</td>
<td>Precedence Networks</td>
<td>presentation 7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Laminate floor installation</td>
</tr>
<tr>
<td>Feb 24</td>
<td>Precedence Networks</td>
<td>presentation 8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marble, terrazzo and stone installation</td>
</tr>
<tr>
<td>Feb 26</td>
<td>Precedence Networks</td>
<td>Read: Chapter 6</td>
</tr>
<tr>
<td>Mar 3</td>
<td>Precedence Networks</td>
<td>presentation 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tub and shower installation</td>
</tr>
<tr>
<td>Mar 5</td>
<td>Tutorial 3</td>
<td>Activity List Due</td>
</tr>
<tr>
<td>Mar 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar 12</td>
<td>Exam 2</td>
<td></td>
</tr>
<tr>
<td>Mar 17</td>
<td>Spring Break</td>
<td></td>
</tr>
<tr>
<td>Mar 19</td>
<td>Spring Break</td>
<td></td>
</tr>
<tr>
<td>Mar 24</td>
<td>Schedule Updating and Project Control</td>
<td>Read: Chapter 7</td>
</tr>
<tr>
<td>Mar 26</td>
<td>Schedule Updating and Project Control</td>
<td>presentation 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Install french door</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sequence Activity Due</td>
</tr>
<tr>
<td>Mar 31</td>
<td>Tutorial 4</td>
<td></td>
</tr>
<tr>
<td>Apr 2</td>
<td>Resource Allocation and Leveling</td>
<td>Read: Chapter 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>presentation 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Build deck</td>
</tr>
<tr>
<td>Apr 7</td>
<td>Resource Allocation and Leveling</td>
<td>Read: Chapter 8</td>
</tr>
<tr>
<td>Apr 9</td>
<td>Tutorial 5</td>
<td>presentation 12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sidewalk construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final Project Report Due</td>
</tr>
<tr>
<td>Apr 14</td>
<td>Exam review</td>
<td></td>
</tr>
<tr>
<td>Apr 16</td>
<td>Exam 3</td>
<td></td>
</tr>
</tbody>
</table>

NOTES:
1. The instructor reserves the right to make course content and schedule changes as deemed necessary and appropriate at any time during the academic semester.
2. You may choose to present the papers searched by yourself instead of using my posted paper. However, you must get my approval of your searched papers at least one week before you p
BCN 4730 Construction Safety

Professor: Carol M. Woodson, Ph.D., AIC, LEED AP
OSHA Construction Outreach Trainer

Contact Info: Office: 2114 Bldg. 50  Email: c.woodson@unf.edu  Office phone: 904-620-2746

Office Hours: Tuesday and Thursday 1:00pm to 3:30pm

Meeting Periods: Tuesday and Thursday 10:50am to 12:05pm Bldg. 50 Rm. 1402

Course Description: (from catalog) Construction safety issues, concerns, requirements and procedures. The analysis includes cost, planning, administration, inspection, prevention, loss control and the drug-free work place.

Prerequisites: BCN 3762

Objectives: To expose students to all aspects of Construction Safety
To examine the principles of Ethics in Safety
To familiarize students with OSHA regulations
To examine the importance safety development and management for a company
To acquaint students with the economic affects of safety pertaining to risk management and company bottom lines
To familiarize students with the laws, rights, and obligations of Worker’s compensation
To explore concepts and procedures for preventing violence in the workplace
To examine ways to enforce safety on the jobsite
To expose students to industry guest speakers pertaining to the organization and importance of their company safety programs.
To instruct and administer the test in order for students to complete the requirements for and receive OSHA 10hr certification at the completion of this course.


Method: Lecture/discussion classes and reading assignments. Open class discussion is an important element of this class, voluntarily or involuntarily. Students are responsible for the content of all reading assignments whether or not the material is covered in class. Reading assignments should be done before the class in which they are discussed. Instructor will give out handouts and/or invite guest speakers from the construction periodically to supplement text; you are responsible for the content of both. Lecture material will augment reading assignments.

Tests: There will be two (2) tests given (mid-term & final) A separate test will be given for the OSHA 10hr certification; it carries no points towards your grade, only for certification. Tests results must be discussed with the instructor within 48 hours after the test has been graded and reviewed. Makeup tests will NOT be given for unexcused absences.

Outcomes & Assessment: Final grades will be based on the following:
Each homework assignment, research paper or test is worth 100 points. The content of these will be structured to meet the objectives for this course. The total number of points earned at the end of the semester will be divided by the total sum of assignments, papers and tests given, to produce your final grade.

Appendix B – Course Syllabi
Grading Scale:

<table>
<thead>
<tr>
<th>Score Range</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93-100</td>
<td>A</td>
</tr>
<tr>
<td>89-92</td>
<td>A-</td>
</tr>
<tr>
<td>86-88</td>
<td>B+</td>
</tr>
<tr>
<td>83-85</td>
<td>B</td>
</tr>
<tr>
<td>79-82</td>
<td>B-</td>
</tr>
<tr>
<td>76-78</td>
<td>C+</td>
</tr>
<tr>
<td>69-75</td>
<td>C</td>
</tr>
<tr>
<td>60-68</td>
<td>D</td>
</tr>
<tr>
<td>0-59</td>
<td>F</td>
</tr>
</tbody>
</table>

Attendance: You have the responsibility to be here for class. I have the responsibility to make the class interesting, relevant, and challenging. Please contact me before the class if you are ill and cannot attend a class in order to be excused. It is the policy of the Construction Management department that students must attend 80% of the classes, it will be enforced. You are only allowed 6 unexcused absences. You are not permitted to enter the class late. It is rude and disruptive to me and your fellow classmates. Be here on time. **Students will conduct themselves in a professional and respectful manner at all times**. Failure to do so will result in the removal from class. Do not ask me to accept your assignments late or to give you a grade you did not earn, it is not negotiable. Turn your cell phones off while in class and put them away. You may use your laptop to take notes only, no emailing or surfing the net while in class.

Assignments: There will be written assignments given throughout the semester in the manner of homework and/or papers. There will be a minimum of 4 assignments. Due dates will be given with the assignments. This course is registered in Blackboard. **All assignments will be individual. No collaborating on any assignments!** Do your own work! This class does not due group projects. It is structured to determine how well you think and work on your own. All work is to be presented in a professional manner. *****WORK WILL NOT BE ACCEPTED LATE FOR ANY REASON*****

Honor Code: Students are expected to comply with the spirit and intent of the University Academic Honesty Policy as stated in the Undergraduate Catalogue. Please see Undergraduate Student Handbook for all related policies and procedures. Any cheating, collaborating, or plagiarism on tests, papers or homework will result in the immediate failure of the class. Do your own work!

Course Schedule:

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Reading Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week #1</td>
<td>Safety Movement in Construction</td>
<td>Chap Intro</td>
</tr>
<tr>
<td>Week #2</td>
<td>OSHA compliance/10 hr Training</td>
<td>Chap 6-11</td>
</tr>
<tr>
<td>Week #3</td>
<td>OSHA compliance/ 10 hr Training</td>
<td></td>
</tr>
<tr>
<td>Week #4</td>
<td>OSHA compliance/10 hr Training</td>
<td></td>
</tr>
<tr>
<td>Week #5</td>
<td>Theories and Concepts</td>
<td>Chap 1</td>
</tr>
<tr>
<td>Week #6</td>
<td>Construction Personnel in Safety</td>
<td>Chap 2</td>
</tr>
<tr>
<td>Week #7</td>
<td>Accident Causation Theories</td>
<td>Chap 3</td>
</tr>
<tr>
<td>Week #8</td>
<td>Ethics in Safety Mid-Term</td>
<td>Chap 4</td>
</tr>
<tr>
<td>Week #9</td>
<td>Workers Compensation</td>
<td>Chap 5</td>
</tr>
<tr>
<td>Week #10</td>
<td>Accident Reporting and Record Keeping</td>
<td>Chap 14</td>
</tr>
<tr>
<td>Week #11</td>
<td>Hazard Analysis/ Environmental Safety</td>
<td>Chap 13</td>
</tr>
<tr>
<td>Week #11</td>
<td>Stress in the Workplace</td>
<td>Chap 19</td>
</tr>
</tbody>
</table>
3/4/2011

Week #12  Preventing Violence in the Workplace  Chap 17
Week #13  Safety Programs and Policies  Chap 12
Week #14  Promoting and Enforcing Safety  Chap 21
Final Exam

Professor reserves the right to alter the syllabus as necessary to execute the course. You will be notified in class if this happens in order to amend your syllabus.
BCN 4753 Construction Administration and Economics

SYLLABUS

BCN 4753: Construction Administration and Economics (In-Class Section)

Instructor: James J. Sorce, MBA
Telephone: (904) 620-2759
Office: Building 50, Room 3104
Fax: (904) 620-2573
Class Hours: 12:40pm – 2:20pm MTWR
Cell: (904) 703-5189
Office Hours: 2:30pm – 3:30 pm MTWR
Email: James.Sorce@unf.edu

I. Textbooks And Other Readings

The textbook should be available at the UNF bookstore, or the College Book Rack. You may be able to get the book online as well.

Recommended background readings:
The Wall Street Journal
ENR The Construction Weekly

Useful and highly recommended websites:
http://www.hoovers.com/free
http://finance.yahoo.com/
http://finance.google.com/finance
http://www.enr.com/
http://www.construction.com/
http://enr.construction.com/people/topLists/topContractor/topCont_1-50.asp
http://www.unf.edu/library/guides/basesconstruction.html
http://www.unf.edu/library/guides/baseseconomics.html

II. Course Objectives:

- Provide an understanding of business plan preparation and organization.
- Provide an introduction to the current economic context of the construction industry.
- Provide practice in written and oral communications.
- Provide an introduction to construction accounting.
- Provide an understanding of risk management in construction.
- Provide an understanding of construction financial management.
- Provide an opportunity for participation in the delivery of a community service project.
- Enhance Internet literacy.
- Provide an understanding of the importance of effective resource allocation.

III. Expected Outcomes: The student will gain:

- An understanding of how to prepare a Business Plan for a construction enterprise.
- Knowledge of the relevant terminology and accounting practices for construction enterprises.
- An understanding of the current economic context of the construction industry.
- An understanding of the allocation of resources in the context of a construction enterprise.
- An understanding of the environment and conditions that construction companies operate under.
- An understanding of how effective risk management and financial management can increase profits.
- The ability to locate market opportunity and an understanding of competitive advantage.
• Experience in oral communications through a required presentation.
• An awareness of the role and importance of community service.
• Enhanced skills related to using the Internet as a reliable reference source.
• Enhance personal communication skills, both written and oral.

IV. Course Requirements
Prerequisites: Principles of Macroeconomics, Principles of Microeconomics and Financial Accounting or equivalents.

V. Evaluation and Grading
Learning Methods:
This course will include instructor-led discussions, guest industry lectures, oral presentations and written examinations by individual efforts.

Students will earn grades according to the following scheme:

<table>
<thead>
<tr>
<th>Points</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Overview Presentation</td>
<td>25</td>
</tr>
<tr>
<td>Mid-term</td>
<td>30</td>
</tr>
<tr>
<td>Service Learning Project</td>
<td>15</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30</td>
</tr>
<tr>
<td>Total Points</td>
<td>100</td>
</tr>
</tbody>
</table>

Note: Student’s final grades will be assigned based on the plus/minus system.

Attendance policy:
Class Attendance policy: “Attendance of classes is mandatory. Students must attend 80% of all classes in order to receive a passing grade.” BCM classes meeting in summer b cannot be missed more than three times in order to receive a passing grade. If you are going to miss class you must notify me in advance of the class by telephone or email to receive an “excused absence.” An “excused absence” will only be given for an illness or family emergency, which is supported by written documentation. Attendance will be noted at the beginning of the class period. Two late arrivals will be recorded as an unexcused absence. Continued tardiness will result in a reduction of final grade.

Assignments:
Construction Company Profile and Industry Environment Overview Presentation
This is an individual assignment. Each student will choose a different construction company listed on the ENR top 400. The company must be different from the online section as well. This list can be found on the Internet. I have provided the link above. Each student will be required to provide an in-class 8 – 10 minute presentation of the company. You will need to include financial data and ratios, history, industry overview, market potential, leadership information, and economic environment. This will also include a recommendation as to where company efforts should be focused and where resources should be cut. You will need to include a complete evaluation of the environment that your company operates in. This will also include, but not be limited to, looking at the company’s competition, the nature of the resources utilized by your company, and how governmental regulations affect the industry. Special attention should be focused on what drives the cost in the industry that your company operates in. You must include references, at least 4 viable sources. These sources must be cited in the text or a reduction in grade will result. Please use any style you feel comfortable with. Please submit your paper to the digital drop box in blackboard.

Exams will be in class multiple choice and some short answer 50 to 60 questions. No
bluebook needed.

Academic Integrity:
UNF places high priority on, and strives to uphold the highest standards of academic integrity while protecting the rights of students and faculty. Should any instructor find evidence of cheating, plagiarism, or other inappropriate assistance in work presented by a student, the instructor should inform the student of the action to be taken” (UNF current Catalog). At minimum, the action I will take for any incidence of violation of academic integrity will be an F (failing grade) in the course and dismissal of the student committing the violation from the class.

IX. Students With Disabilities
If you have a disability as defined by the Americans with Disabilities Act (ADA), which may require any accommodations or auxiliary aid(s), please contact and register with the UNF Disability Resource Center (located in Honors Hall 10/1201; phone: 620-2769). Please refer to UNF’s Disabled Services Program Student Handbook for more details about the Disability Resource Center.

X. Classroom Etiquette
This class is being recorded for the online students. There is certain etiquette that must be followed. To speak you must raise your hand. You will be called upon individually to allow the microphones in your area to be turned up so everyone can hear your thoughts or questions. Students are expected to remain silent to limit background noise. Students are also expected to remain polite during classroom discussions. Even during heated debates, you must treat your instructor and classmates with respect. Violation of this policy will result in a reduction of your class grade and, if the violation is significant enough, could result in a failing grade for the class. For example, you should not make derogatory remarks about your classmates’ ideas. Instead, explain why you think they are wrong, backing up your viewpoint with sound analysis and refraining from personal attacks. Another example is being quiet while someone else (including your instructor) has the floor.

BCN 4753 Summer 2009 Tentative Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/24</td>
<td>Wednesday</td>
<td>Syllabus, projects, goals, and expectations</td>
</tr>
<tr>
<td>6/25</td>
<td>Thursday</td>
<td>Construction Environment</td>
</tr>
<tr>
<td>6/29</td>
<td>Monday</td>
<td>Business Planning and Organizational Management</td>
</tr>
<tr>
<td>6/30</td>
<td>Tuesday</td>
<td>Financial Management</td>
</tr>
<tr>
<td>7/1</td>
<td>Wednesday</td>
<td>Construction Accounting</td>
</tr>
<tr>
<td>7/2</td>
<td>Thursday</td>
<td>Construction Accounting (continued)</td>
</tr>
<tr>
<td>7/6</td>
<td>Monday</td>
<td>Capital Needs and Sources</td>
</tr>
<tr>
<td>7/7</td>
<td>Tuesday</td>
<td>Risk Management</td>
</tr>
<tr>
<td>7/8</td>
<td>Wednesday</td>
<td>Risk Management</td>
</tr>
<tr>
<td>7/9</td>
<td>Thursday</td>
<td>TEST 2</td>
</tr>
<tr>
<td>7/13</td>
<td>Monday</td>
<td>Managing Costs and Profits</td>
</tr>
<tr>
<td>7/14</td>
<td>Tuesday</td>
<td>Managing Costs and Profits (continued)</td>
</tr>
<tr>
<td>7/15</td>
<td>Wednesday</td>
<td>Managing Costs and Profits (continued)</td>
</tr>
<tr>
<td>7/16</td>
<td>Thursday</td>
<td>Employment Laws and Regulations</td>
</tr>
<tr>
<td>7/20</td>
<td>Monday</td>
<td>Individual Presentations</td>
</tr>
<tr>
<td>7/21</td>
<td>Tuesday</td>
<td>Individual Presentations (continued)</td>
</tr>
<tr>
<td>7/22</td>
<td>Wednesday</td>
<td>Licensing</td>
</tr>
<tr>
<td>7/23</td>
<td>Thursday</td>
<td>Workman’s Comp</td>
</tr>
<tr>
<td>7/27</td>
<td>Monday</td>
<td>Bonds and Investing</td>
</tr>
<tr>
<td>7/28</td>
<td>Tuesday</td>
<td>Contracts and Safety</td>
</tr>
<tr>
<td>7/29</td>
<td>Wednesday</td>
<td>Dubai</td>
</tr>
<tr>
<td>7/30</td>
<td>Thursday</td>
<td>TEST 2</td>
</tr>
</tbody>
</table>
BCN 4900 Directed Individual Study

This course has not been taught in the last two years. Thus, there is no syllabus.

Catalog Description

This course provides CM students the opportunity to study advanced construction topics, experience an international trip to study other culture’s buildings and construction methods or participate in a CM applied research program.
BCN 4930 Special Topics/Seminars

UNIVERSITY OF NORTH FLORIDA
DEPARTMENT OF BUILDING CONSTRUCTION MANAGEMENT
SPRING 2009

Course: BCN 4930 - Special Topics: Seminars

Credits: 3 credits

Professor: Erin A. Jiang, Ph.D., CPC

Email: a.jiang@unf.edu

Office: 50-2120

Office Phone: 904-620-2193

Office Hours: T R 2:00PM-4:00PM

Meeting Time and Location: T R 9:25AM - 10:40AM


Reference: Means Square Foot Costs, R.S.Means;

Course Objectives:
This course lays the groundwork for construction project planning, management, and control. Each student shall gain an understanding of:

- A comprehensive look at the construction industry
- Contractual obligations of the parties to construction
- Organizational models in construction project
- Models of project delivery systems
- Construction project management methods and practice
- Business methods and practice involved in construction project management
- Advancing technologies and current project management technologies
- Economic considerations
- Professionalism and ethics

This course is "content rich," and students are expected to build a knowledge base from information presented in class, readings from the text, and other sources and personal experience.

Course Outcomes:
After studying specific topics, students are expected to be able to preplan and monitor construction project as a consultant to provide professional opinions to owners or developers in the following issues:

- Conceptual design
- Preliminary estimating
- Master scheduling plan
- Construction operation plan
- Project cost forecast and budget control

Except the above issues, students should also understand risk management, safety, and dispute resolution in construction management.
Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessments</td>
<td>30%</td>
</tr>
<tr>
<td>Projects</td>
<td>45%</td>
</tr>
<tr>
<td>Attendance</td>
<td>10%</td>
</tr>
<tr>
<td>In-class assignment, homework</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Grading Scale

- **A**: 90 – 100
- **A-**: 88 – 89
- **B+**: 85 – 87
- **B**: 80 – 84
- **B-**: 78 – 79
- **C+**: 75 – 77
- **C**: 70 – 74
- **D**: 60 – 69
- **F**: 0 – 59

Attendance policy: Each student is expected to attend all class sessions and be punctual. Regular attendance influences attendance and participation grade. **80% of attendance is required to pass this class.**

Class policy: 1. Usage of cell phone in class is not allowed. Please turn your cell phone off before you step into the class.

2. Submit required assignments on time. **Any late submission would be 10% off of the original grade per calendar day. Submission is NOT accepted later than five calendar days. Students are responsible for getting your assignments back on time.**

Academic Honesty: University Policies and Procedures stipulated in the Student Conduct Code will constitute the main regulations determining the expected behavior and attitude. All course assignments are to be performed individually unless otherwise authorized by the instructor. No student shall receive, offer or give assistance not authorized by the professor in the preparation of any assignment.
## Course Outline

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPICS</th>
<th>ASSIGNMENT MILESTONES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 6</td>
<td>Class survey, Course Outline</td>
<td>Read: Chapter 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Management in Construction Industry</em></td>
</tr>
<tr>
<td></td>
<td>Jan 8</td>
<td>Case study assignments, google sketchup &amp; google earth</td>
<td>Read: Chapter 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Development and Organization of Projects</em></td>
</tr>
<tr>
<td></td>
<td>Jan 13</td>
<td>Project delivery method and contract type</td>
<td>Read: Chapter 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Introduction to an Example Project</em></td>
</tr>
<tr>
<td>2</td>
<td>Jan 15</td>
<td></td>
<td>Read: Chapter 5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Preconstruction site investigation</em></td>
</tr>
<tr>
<td></td>
<td>Jan 20</td>
<td>Estimating Project Cost</td>
<td>Read: Chapter 6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Bidding and Award</em></td>
</tr>
<tr>
<td></td>
<td>Jan 22</td>
<td>Planning and Control of Operations and Resources</td>
<td>Read: Chapter 12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Planning and Control of Operation &amp; Res.</em></td>
</tr>
<tr>
<td>3</td>
<td>Jan 27</td>
<td>Project 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jan 29</td>
<td></td>
<td><em>Assessment 1</em></td>
</tr>
<tr>
<td>4</td>
<td>Feb 3</td>
<td>Presentation</td>
<td></td>
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<tr>
<td></td>
<td>Feb 5</td>
<td>Presentation</td>
<td><em>Project 1 due</em></td>
</tr>
<tr>
<td>5</td>
<td>Feb 10</td>
<td>Project Administration</td>
<td>Read: Chapter 7</td>
</tr>
<tr>
<td></td>
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<td></td>
<td><em>Construction</em></td>
</tr>
<tr>
<td></td>
<td>Feb 12</td>
<td></td>
<td>Read: Chapter 14</td>
</tr>
<tr>
<td></td>
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<td></td>
<td><em>Procurement</em></td>
</tr>
<tr>
<td>6</td>
<td>Feb 17</td>
<td>Project Cost Control</td>
<td>Read: Chapter 13</td>
</tr>
<tr>
<td></td>
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<td></td>
<td><em>Cost Engineering</em></td>
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<td></td>
<td>Feb 19</td>
<td></td>
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<tr>
<td>7</td>
<td>Feb 24</td>
<td>Resource-loaded scheduling</td>
<td>Read: Chapter 9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><em>Selecting a Professional Construction Mgr.</em></td>
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<tr>
<td></td>
<td>Feb 26</td>
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<tr>
<td>8</td>
<td>Mar 3</td>
<td>Cash Flow Analysis</td>
<td></td>
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<td></td>
<td>Mar 5</td>
<td></td>
<td><em>Assessment 2</em></td>
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<td>9</td>
<td>Mar 10</td>
<td>Project Presentation</td>
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<td></td>
<td>Mar 12</td>
<td>Project Presentation</td>
<td><em>Project 2 due</em></td>
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<td></td>
<td>Mar 17</td>
<td>Spring Break</td>
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<td></td>
<td>Mar 19</td>
<td>Spring Break</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Mar 24</td>
<td>Earned Value Analysis</td>
<td>Read: Chapter 17</td>
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<tr>
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<td>Mar 26</td>
<td></td>
<td><em>Safety &amp; Health</em></td>
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<td>11</td>
<td>Mar 31</td>
<td>Breakeven Analysis</td>
<td>Read: Chapter 20</td>
</tr>
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<td></td>
<td><em>Claims, Liability &amp; Disputes</em></td>
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<td></td>
<td>Apr 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Apr 7</td>
<td>Finalize project</td>
<td></td>
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<td></td>
<td>Apr 9</td>
<td></td>
<td><em>Assessment 3</em></td>
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<td>13</td>
<td>Apr 14</td>
<td>Project Presentation</td>
<td></td>
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<td>Apr 16</td>
<td>Project Presentation</td>
<td><em>Project 3 due</em></td>
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</tbody>
</table>

**NOTE:**
The instructor reserves the right to make course content and schedule changes as deemed necessary and appropriate at any time during the academic semester.
BCN 4931 Seminars: Construction Management

SYLLABUS
BCN 4931: Senior Seminar

Instructor: James J. Sorce, MBA
           Telephone: (904) 620-2759
Office: Building 50, Room 2304
        Fax: (904) 620-2573
Class Hours: 4:30pm – 5:45pm T
            5189
Office Hours: 4:00pm – 4:30pm TR
            Cell: (904) 703-
            Email: James.Sorce@unf.edu

I. Textbooks and Other Readings
   Required: The Choice: A Fable of Free Trade and Protectionism
            By Russell Roberts
   Recommended background readings:
   The Wall Street Journal
   ENR the Construction Weekly

   Useful and highly recommended websites:
   http://unf.edu/~james.sorce
   http://finance.yahoo.com/
   http://finance.google.com/finance
   http://www.enr.com/
   http://www.construction.com/
   http://enr.construction.com/people/topLists/topContractor/topCont_1-50.asp
   http://www.unf.edu/library/guides/basesconstruction.html
   http://www.unf.edu/library/guides/baseseconomics.html

II. Course Objectives:
   • Provide an understanding of specific problems in project management.
   • Provide an introduction to the current and new technologies used in the construction industry.
   • Provide practice in written communications.
   • Provide insight to project administration.
   • Provide an understanding of the importance of effective resource allocation.
   • Provide an opportunity to have an open discussion with leaders in the construction field.

III. Expected Outcomes: The student will gain:
   • An understanding of how project managers control a project from start to finish.
   • The Knowledge of the relevant technological advances in specific types of construction.
   • An understanding of the current economic context of the construction industry.
   • An understanding of how specific companies control a project.
   • An understanding how specific conditions that construction companies operate under affect project management.
   • The ability to locate market opportunity and an understanding of competitive advantage.
   • Experience in communicating with others through participation in class discussions with industry leaders.
   • An awareness of the role and importance of effective project management.
   • An enhancement personal written and oral communication skills.
IV. Course Requirements

Co-requisites: BCN 4709 Construction Management Capstone

V. Evaluation and Grading

Learning Methods:
This course will include guest industry lectures, instructor-led discussions and written reports of research by individual efforts.

Students will earn grades according to the following scheme:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation</td>
<td>33%</td>
</tr>
<tr>
<td>Submittals</td>
<td>33%</td>
</tr>
<tr>
<td>Final Project &amp; Presentation</td>
<td>34%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Note: Student’s final grades will be assigned based on the plus/minus system.

Attendance policy:
Attendance of classes is mandatory.

If you are going to miss class you must notify me in advance of the class by telephone or email to receive an “excused absence.” An “excused absence” will only be given for an illness or family emergency, which is supported by written documentation. Attendance will be noted at the beginning of the class period. Two late arrivals will be recorded as an unexcused absence. Continued tardiness will result in a reduction of final grade.

Assignment:
Team project: Your team will bid one of three projects. You will treat this like a real life situation. You will present the project on one of the last days of class. You will be bidding against the other teams. The projects will be presented in class. You will be given submittal dates as we move through the term. Your team will be responsible for turning all work in on time. No late work will be accepted.

Academic Integrity:
UNF places high priority on, and strives to uphold the highest standards of academic integrity while protecting the rights of students and faculty. Should any instructor find evidence of cheating, plagiarism, or other inappropriate assistance in work presented by a student, the instructor should inform the student of the action to be taken” (UNF current Catalog). At minimum, the action I will take for any incidence of violation of academic integrity will be an F (failing grade) in the course and dismissal of the student committing the violation from the class.

IX. Students With Disabilities

If you have a disability as defined by the Americans with Disabilities Act (ADA), which may require any accommodations or auxiliary aid(s), please contact and register with the UNF Disability Resource Center (located in Honors Hall 10/1201; phone: 620-2769). Please refer to UNF’s Disabled Services Program Student Handbook for more details about the Disability Resource Center.

X. Classroom Etiquette

Students are expected to remain polite during classroom discussions. Even during heated debates, you must treat your instructor and classmates with respect. Violation of this policy will result in a reduction of your class participation grade that, if the violation is significant enough, could result in a failing grade for the class. For example, you should not make derogatory remarks about your classmates’ ideas. Instead, explain why you think they are wrong, backing
up your viewpoint with sound analysis and refraining from personal attacks. Another example is being quiet while someone else (including your instructor) has the floor.
BCN 4944 Construction Management Internship

This syllabus is presented at the end of the course electives section.
BCN 4587C Green Construction and Sustainability I
Fall 2009 Syllabus

(Previously known as “Environmental Issues in Land Development and Construction”, this course is a component of the CM Department’s “Green Construction and Sustainability Track” which is being sponsored by Elkins Constructors, Inc.)

Instructor: J. David Lambert, Ph.D.; Email: jlambert@unf.edu
Course Times: 10:50 pm – 12:05 pm, Tuesday/Thursday; Location: UNF Arena, Room 1053
Office Hours: 1:00pm - 3:00pm Tuesday and by appointment, 50/3026

Expected Outcomes: The student will gain:
- Adequate knowledge of environmental issues affecting development and construction to be able to recognize potential negative environmental impacts in field situations.
- Knowledge of the relevant terminology, the responsibility of management, and the resources available to aid in effective management of environmental issues affecting the construction industry.
- Experience in working with others through team discussions and projects.
- Enhanced personal communication skills, both oral and written.
- Enhanced computer literacy demonstrated through the completion of the research project.

Description: This course will provide the participants with an introduction to the natural, economic, political, and legal issues related to the environment that may affect construction management. Topics include the environmental impact of land development and construction, the historical context for land use planning and environmental regulation, specific regulations affecting developers and construction managers, the process and players involved in the environmental review of developments, and practical modern methods for construction managers to prevent or minimize the negative environmental impacts of construction and land development.

Evaluation and Grading:

<table>
<thead>
<tr>
<th>Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perfect Attendance Credit</td>
<td>50 (includes attendance at field trip)</td>
</tr>
<tr>
<td>Panel Discussions (8 sessions)</td>
<td>200 (25 pts. for each group paper/presentation x 8)</td>
</tr>
<tr>
<td>Group Project</td>
<td>Oral Presentation (PowerPoint) 200 (note: all group members must participate equally)</td>
</tr>
<tr>
<td></td>
<td>Written Report 300 (note: everyone in group gets same points)</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>200</td>
</tr>
<tr>
<td>Final “Take-Home” Exam</td>
<td>50</td>
</tr>
<tr>
<td>Total 1000 points</td>
<td>(Final grades will use the plus/minus system).</td>
</tr>
</tbody>
</table>

Learning Methods:
The course will integrate a series of instructor-led panel discussions, guest lectures, videos, field trips, handouts that supplement the text, a course project completed by student teams, group discussion paper assignments, a midterm exam, and a final exam.

Appendix B – Course Syllabi
Attendance Policy:
CM Departmental Class Attendance Policy: “Attendance of BCM classes is mandatory. **Students must attend 80% of all BCM classes in order to receive a passing grade.**” If you are going to miss class, you must notify the instructor in advance of the class by telephone or email to receive an “excused absence”. An “excused absence” will only be given for an illness or family emergency which is supported by written documentation.

Attendance will be noted at the beginning of the class session. **Three “late arrivals” will result in a reduction of one-half letter grade in the final course grade. Six or more “late arrivals” will result in a reduction of a full letter grade.**

In order to receive the **“perfect attendance points”** noted in the evaluation and grading section of this syllabus, **you must attend “all but one” of the classes AND the required field trip.**

Assignment Policy:
Assignments are to be turned in by the deadlines stated in this syllabus. All assignments will be uploaded to the course Blackboard site. **There will be no partial credit for late submissions (except in the case of an “excused absence”).**

Exams:
There will be an in-class, closed-book midterm exam consisting of fill-in-the-blank and short answer questions. An outline of the specific topics to be included in the midterm exam will be supplied. There will also be an “open-book” “take-home” final exam.

Panel Discussion Series:
Each student has been assigned to a 4-person “discussion group” Each discussion group will be expected to meet outside of class 8 times in order to discuss 8 sets of questions and/or complete specific exercises. Discussion group assignments will be distributed one week prior to the date when they will be discussed. To facilitate the in-class discussion of each set of questions/exercises (because of the large class size), each discussion group will appoint a representative from their group to participate in each of the instructor-led panel discussions. **Every student should be appointed to represent the group on the panel twice.** Each discussion group will prepare one “group consensus paper” for each panel discussion (with the answers/results of their discussion), which is due before the date of the panel discussion (see course schedule for due dates). For each panel assignment, everyone in the group will receive the same points based on the quality of the “group consensus paper” AND the quality of the group representative’s presentation and participation in the panel discussion (in other words, the group should prepare their appointee well). Group papers should be as long as needed to address the question or complete the exercise assigned, but not less than 2-pages single-spaced. The group papers should be typed and clearly labeled with the class name, assignment number, group number, date, and names of all of the group members. Group representatives serving on the discussion panel should be prepared to make a 3 to 5 minute presentation based on the group paper and participate fully in the panel discussion.

Field Trip:
There will be one required field trip (see course schedule). There may be optional field trips for extra credit. You must provide your own transportation.

Group Project:
Each student has been assigned to a 4-person project team (same team as your “discussion group”, see attachment to this syllabus). There will be separate handouts and discussions in class providing details about the group project and requirements. There will be a “lottery” held during class to determine the date of your group’s oral presentation. The oral presentation should utilize PowerPoint. Your group will also turn in a final written report no later than Friday, December 4th. Each group will be required to meet with the instructor one time to review the group’s draft project outline, and then a second time to make a practice presentation before giving the in-class final presentation.

Extra Credit Opportunities: Information about other “extra credit” opportunities will be discussed in class.

Fall 2009 Course Schedule (Version 1) – BCN 4587: Green Construction I
(subject to update during the semester to reflect guest speaker scheduling, hurricanes, etc.)
### Appendix B – Course Syllabi

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Notes and Assignments Due</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4/2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
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<td>-----------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Tues, Aug 25</td>
<td>Introduction to Course and The 'Group Discussion' Approach</td>
<td></td>
</tr>
<tr>
<td>Thurs, Aug 27</td>
<td>Lecture/Video – “Phoenix: Urban Desert” (A Case Study)</td>
<td></td>
</tr>
<tr>
<td>Tues, Sept 1</td>
<td>Discussion Panel # 1</td>
<td></td>
</tr>
<tr>
<td>Thurs, Sept 3</td>
<td>Group Project Description and Requirements</td>
<td></td>
</tr>
<tr>
<td>Tues, Sept 8</td>
<td>Discussion Panel # 2</td>
<td></td>
</tr>
<tr>
<td>Thurs, Sept 10</td>
<td>Class Cancelled in exchange for Field Trip</td>
<td></td>
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<tr>
<td>Fri, Sept 11</td>
<td>FIELD TRIP TO Atlantic Beach Study Area (3pm – 5pm)</td>
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<tr>
<td>Tues, Sept 15</td>
<td>Discussion Panel # 3</td>
<td></td>
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<tr>
<td>Thurs, Sept 17</td>
<td>Lecture/Video – “The Next Industrial Revolution”</td>
<td></td>
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<tr>
<td>Tues, Sept 22</td>
<td>Discussion Panel # 4</td>
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<tr>
<td>Thurs, Sept 24</td>
<td>Lecture – Embodied Energy Concepts</td>
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<tr>
<td>Tues, Sept 29</td>
<td>Discussion Panel # 5</td>
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<tr>
<td>Thurs, Oct 1</td>
<td>Lecture – Embodied Energy Concepts (cont.)</td>
<td></td>
</tr>
<tr>
<td>Tues, Oct 6</td>
<td>Class Cancelled in exchange for individual group meetings with instructor (TBA) to review project outline</td>
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<tr>
<td>Thurs, Oct 8</td>
<td>MIDTERM EXAM</td>
<td></td>
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<tr>
<td>Tues, Oct 13</td>
<td>Discussion Panel # 6</td>
<td></td>
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<tr>
<td>Thurs, Oct 15</td>
<td>Class cancelled in exchange for Mandatory Attendance at the <strong>CCEC Employer Showcase</strong> (noon – 5pm)</td>
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<tr>
<td>Note: Your attendance will be recorded at the event.</td>
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<tr>
<td>Tues, Oct 20</td>
<td>Discussion Panel # 7</td>
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<tr>
<td>Thurs, Oct 22</td>
<td>Lecture</td>
<td></td>
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<tr>
<td>Tues, Oct 27</td>
<td>Discussion Panel # 8</td>
<td></td>
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<tr>
<td>Thurs, Oct 29</td>
<td>Lecture</td>
<td></td>
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<tr>
<td>Tues, Nov 3</td>
<td>Class Cancelled in exchange for individual group meetings with instructor (TBA) to review Draft Project Presentations</td>
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<tr>
<td>Thurs, Nov 5</td>
<td>Class Cancelled in exchange for individual group meetings with instructor (TBA) to review Draft Project Presentations</td>
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<tr>
<td>Tues, Nov 10</td>
<td>Lecture/Video – “Portland, Oregon” (A Case Study)</td>
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<td>Thurs, Nov 12</td>
<td>Lecture</td>
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<tr>
<td>Tues, Nov 17</td>
<td>Oral Presentations of Projects</td>
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<td>Thurs, Nov 19</td>
<td>Oral Presentations of Projects</td>
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<tr>
<td>Tues, Nov 24</td>
<td>Oral Presentations of Reports</td>
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<tr>
<td></td>
<td>Final “take-home” Exam Distributed</td>
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</table>

Appendix B – Course Syllabi
<table>
<thead>
<tr>
<th>Date</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thurs., Nov 26</td>
<td><strong>Thanksgiving Holiday</strong></td>
</tr>
<tr>
<td>Tues, Dec 1</td>
<td>Oral Presentations of Projects</td>
</tr>
<tr>
<td>Thurs, Dec 3</td>
<td>Oral Presentations of Projects</td>
</tr>
<tr>
<td></td>
<td><strong>Course Evaluation</strong></td>
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<td></td>
<td>Final Group Project Paper and Copy of PowerPoint Presentations</td>
</tr>
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<td></td>
<td>Due by Friday, Dec 4, Midnight</td>
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<tr>
<td></td>
<td>Final &quot;take-home&quot; Exam Due</td>
</tr>
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</table>
BCN 4594C Green Construction and Sustainability II

BCN 4594C Green Building II  3 Credits

Professor: Dr. Carol Woodson

Contact Info: Office Hours: After class and by appointment. Email to make an appointment. c.woodson@unf.edu
Office phone: 904-620-2746 Office: 2114 Building 50

Meeting Periods: 9:00am-10:40am MTWR  Room 3104

Course Description: (from catalog) This is the second course in a two-course elective track for students specializing in green construction and sustainability. This course addresses the environmental impact of land development and construction. Topics include specific regulations affecting developers and construction managers, the environmental review of developments and methods to prevent or minimize the negative environmental impacts of construction and land development.

Prerequisites: PHY 2054

Objectives:
To expose students to sustainability theories and practices as they pertain to green building design and delivery.
To familiarize students with the components of the LEED certification system for buildings, and other current assessment systems
To examine the green building process
To explore green building systems and ecological design
To examine alternative energy systems in the built environment
To familiarize students with building and ecosystem hydrology
To examine green building materials and how they relate to traditional building materials
To explore Indoor Quality Issues in the built environment
To introduce students to the economic analysis of sustainable construction
To familiarize students with building operations and commissioning
To examine ethics in sustainable construction
To explore and discuss current events and trends in sustainable construction

Required Text: Sustainable Construction: Green Building Design and Delivery, 2nd Edition

Method: Lecture/discussion classes and reading assignments. Open class discussion is an important element of this class, voluntarily or involuntarily. Students are responsible for the content of all reading assignments whether or not the material is covered in class. Reading assignments should be done before the class in which they are discussed. Instructor will give out handouts and/or invite guest speakers from the construction industry periodically to supplement text; you are responsible for the content of both. Lecture material will augment reading assignments.

Tests: There will be two tests given (mid-term & final) Test results must be discussed with the instructor within 48 hours after the test has been graded and reviewed. Makeup tests will NOT be given for unexcused absences.
3/4/2011

Outcomes & Assessment: Final grades will be based on the following:

Each homework assignment, research paper or test is worth 100 points. The content of these will be structured to meet the objectives for this course. The total number of points earned at the end of the semester will be divided by the total sum of the assignments, papers and tests given, to produce your final grade.

Grading Scale:

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93-101</td>
<td>A</td>
</tr>
<tr>
<td>89-92</td>
<td>A-</td>
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<tr>
<td>86-88</td>
<td>B+</td>
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<tr>
<td>83-85</td>
<td>B</td>
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<tr>
<td>79-82</td>
<td>B-</td>
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<tr>
<td>76-78</td>
<td>C+</td>
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<tr>
<td>69-75</td>
<td>C</td>
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<tr>
<td>60-68</td>
<td>D</td>
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<tr>
<td>0-59</td>
<td>F</td>
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</tbody>
</table>

Attendance: You have the responsibility to be here for class. I have the responsibility to make the class interesting, relevant, and challenging. Please contact me before the class if you are ill and cannot attend a class in order to be excused. It is the policy of the Construction Management department that students must attend 80% of the classes, it will be enforced. You are only allowed 5 unexcused absences. You are not permitted to enter the class late. It is rude and disruptive to me and your fellow classmates. Students will conduct themselves in a professional and respectful manner at all times. Failure to do so will result in the removal from the class. Do not ask me to accept your assignments late or to give you a grade you did not earn, it is not negotiable. Turn your cell phones off and put them away while in class. You may use your laptop to take notes only, no emailing or surfing the net while in class.

Assignments: There will be 2 assignments given throughout the semester in the manner of homework and/or papers. They will be lengthy. Assignments and due dates/time will be posted on Blackboard. This course is registered in Blackboard. Check Blackboard daily for announcements, assignments, etc. All assignments will be individual. No collaborating on any assignments! Do your own work! This class does not do group projects. It is structured to determine how well you think and work on your own. All work is to be presented in a professional manner.

***WORK WILL NOT BE ACCEPTED LATE FOR ANY REASON***

Honor Code: Students are expected to comply with the spirit and intent of the University Academic Honesty Policy as stated in the Undergraduate Catalogue. Please see Undergraduate Student Handbook for all related policies and procedures. Any cheating, collaborating, or plagiarism on tests, papers or homework will result in the immediate failure of the class. Do your own work!

Course Schedule:

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Reading Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week #1</td>
<td>Introduction/Background/ Ethics</td>
<td>Chap 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>Building Assessment/Process</td>
<td>Chap 3 &amp; 4</td>
</tr>
<tr>
<td>Week #2</td>
<td>Ecological Design/Sites &amp; Landscaping</td>
<td>Chap 5 &amp; 6</td>
</tr>
<tr>
<td>Week #3</td>
<td>Continued and Mid Term on Thursday</td>
<td>Chap 7</td>
</tr>
<tr>
<td>Week #4</td>
<td>Energy and Atmosphere</td>
<td>Chap 8</td>
</tr>
<tr>
<td>Week #5</td>
<td>Building Hydrology</td>
<td>Chap 9 &amp; 10</td>
</tr>
<tr>
<td>Week #6</td>
<td>Materials &amp; IAQ &amp; Final on Thursday</td>
<td>Chap 14</td>
</tr>
<tr>
<td>If we have time</td>
<td>The Future of Sustainable Construction</td>
<td>Chap 14</td>
</tr>
</tbody>
</table>

Appendix B – Course Syllabi
Professor reserves the right to alter the syllabus as necessary to execute the course. You will be notified in class if this happens in order to amend your syllabus.
BCN 4751C Housing and Land Development I

This is a new CM course recently added to the curriculum. At this time it has not been taught. Thus, there is no syllabus.

Catalog Description

The application of the critical path method and program evaluation review technique to construction planning, scheduled vs. actual job expenditures, cost forecasting, and development of unit prices from field data.
**BCN 4758C Housing and Land Development II**

This is a new CM course recently added to the curriculum. At this time it has not been taught. Thus, there is no syllabus

**Catalog Description**

This is the second course in a two-course elective track for students preparing for careers in housing and land development. An analysis of land development via the multifaceted full delivery construction processing regarding the build environment will be covered. Emphasis is placed on project feasibility relative to site selection, site acquisition and permitting, value engineering and the construction loans process and funding requirements.

**BCN 4801C Industrial Construction I**

This is a new CM course recently added to the curriculum. At this time it has not been taught. Thus, there is no syllabus

**Catalog Description**

This is the first course in a two-course elective track for students preparing for careers in industrial construction. All aspects of industrial construction practice are examined including: project management, strategic bidding and estimating, ethical conduct, project delivery methods, value engineering, design/build, customer relations and communication.
BCN 4802C Industrial Construction II

This is a new CM course recently added to the curriculum. At this time it has not been taught. Thus, there is no syllabus

**Catalog Description**

This is the second course in a two-course elective track for students preparing for careers in industrial construction. It is the second course in the industrial concentration. All aspects of industrial construction practice are examined including project management, strategic bidding and estimating, ethical conduct, project delivery methods, value engineering, design/build, customer relations and communication.
BCN 4870C Heavy Civil Construction I

Fall 2009

Course: BCN 4870C – Heavy Civil Construction I
Credits: 3 credits
Professor: Erin A. Jiang, Ph.D., CPC
Email: a.jiang@unf.edu
Office: 50-2120
Office Phone: 904-620-2193
Office Hours: T R 3:00PM-5:00PM
Meeting Time and Location: T R 9:25AM - 10:40AM, Building 50/3124


Reference: R. S. Means Heavy Construction Cost Data
Journal of Highway & heavy construction
Journal of Highway & heavy construction products
Journal of Construction Equipment
Journal of Civil Engineering
Engineering News-Records
Library E-journal locator: http://www.unf.edu/library/ej/

Course Objectives:
Estimating is a combination of art and science. The more you get to know about construction methods, sequencing of work, resource estimates, and bidding strategies, the more you will excel in estimating. If you are interested in exploring how an estimate is developed for public infrastructure projects such as roads, bridges, and earthwork projects, then this course will provide you with the basic knowledge you need to start estimating, scheduling, bidding, and managing heavy construction projects.

This course covers principles and methods used in cost estimating, pricing, scheduling, and planning heavy construction projects. Topics include

- estimating and bidding process;
- general requirements and bid pricing;
- cost of labor and equipment;
- material handling and transportation;
- Pile foundation works;
- Highway pavement works;
- Form works;
- Structural concrete works;

Appendix B – Course Syllabi
• Steel structure works;
• Heavy civil project scheduling and planning;

Course Outcomes:
On completion of this course students will be able to work on heavy civil projects in terms of:
• Quantity take-off
• Pricing
• Scheduling
• Planning
• Organizing bidding documents

Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>15%</td>
</tr>
<tr>
<td>Homework, class exercises &amp; quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Paper Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Project</td>
<td>20%</td>
</tr>
<tr>
<td>Project Presentation</td>
<td>10%</td>
</tr>
<tr>
<td>Attendance</td>
<td>10%</td>
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<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90 – 100</td>
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<tr>
<td>A-</td>
<td>88 – 89</td>
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<td>C+</td>
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<td>C</td>
<td>70 – 74</td>
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<tr>
<td>D</td>
<td>60 – 69</td>
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<tr>
<td>F</td>
<td>0 – 59</td>
</tr>
</tbody>
</table>

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2. Submit required assignments on time. **Any late submission would be 20% off the original grade per calendar day. Submission is NOT accepted later more than five calendar days. Students are responsible for getting your assignments back on time.**

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## Course Outline

<table>
<thead>
<tr>
<th>WEEK</th>
<th>DATE</th>
<th>TOPICS</th>
<th>ASSIGNMENT MILESTONES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug. 25</td>
<td>Course Outline &amp; Introduction</td>
<td>Read: Chapter 2</td>
</tr>
<tr>
<td></td>
<td>Aug. 27</td>
<td>Estimating and Bidding Process</td>
<td>Read: Chapter 3</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Presentation Topic Due</strong></td>
</tr>
<tr>
<td>2</td>
<td>Sep. 1</td>
<td>Cost of Construction Labor &amp; Equip.</td>
<td>Read: Chapter 5</td>
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<tr>
<td></td>
<td>Sep. 3</td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>Sep. 8</td>
<td>Handling and transporting material</td>
<td>Read: Chapter 6</td>
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<td></td>
<td>Sep. 10</td>
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<tr>
<td>4</td>
<td>Sep. 15</td>
<td>Construction equipment estimating</td>
<td></td>
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<tr>
<td></td>
<td>Sep. 17</td>
<td></td>
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<tr>
<td>5</td>
<td>Sep. 22</td>
<td><strong>Scheduling</strong></td>
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<td></td>
<td>Sep. 24</td>
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<tr>
<td>6</td>
<td>Sep. 29</td>
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<tr>
<td></td>
<td>Oct. 1</td>
<td><strong>Exam 1</strong></td>
<td></td>
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<tr>
<td>7</td>
<td>Oct. 6</td>
<td>Introduction to term project</td>
<td></td>
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<tr>
<td></td>
<td>Oct. 8</td>
<td>Highways and pavements (superstructure)</td>
<td>Read: Chapter 8</td>
</tr>
<tr>
<td>8</td>
<td>Oct. 13</td>
<td>Pile foundations</td>
<td>Read: Chapter 9</td>
</tr>
<tr>
<td></td>
<td>Oct. 15</td>
<td><strong>Job Fair</strong></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Oct. 20</td>
<td></td>
<td><strong>Presentation 2</strong></td>
</tr>
<tr>
<td></td>
<td>Oct. 22</td>
<td>Form works</td>
<td>Read: Chapter 10</td>
</tr>
<tr>
<td>10</td>
<td>Oct. 27</td>
<td></td>
<td><strong>Presentation 3</strong></td>
</tr>
<tr>
<td></td>
<td>Oct. 29</td>
<td>Concrete works (substructure)</td>
<td>Read: Chapter 10</td>
</tr>
<tr>
<td>11</td>
<td>Nov. 3</td>
<td></td>
<td><strong>Presentation 4</strong></td>
</tr>
<tr>
<td></td>
<td>Nov. 5</td>
<td>Steel structure works</td>
<td>Read: Chapter 11</td>
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<tr>
<td></td>
<td>Nov. 10</td>
<td></td>
<td><strong>Presentation 5</strong></td>
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<tr>
<td>12</td>
<td>Nov. 12</td>
<td>Construction Planning (traffic control, equipment selection, etc)</td>
<td><strong>Presentation 6</strong></td>
</tr>
<tr>
<td></td>
<td>Nov. 17</td>
<td></td>
<td><strong>Presentation 7</strong></td>
</tr>
<tr>
<td></td>
<td>Nov. 19</td>
<td>Project Presentation</td>
<td></td>
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<tr>
<td>13</td>
<td>Nov. 24</td>
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<td></td>
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<tr>
<td></td>
<td>Nov. 26</td>
<td><strong>Thanksgiving</strong></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Dec. 1</td>
<td>Finalize Project &amp; Exam Review</td>
<td><strong>Project Report Due</strong></td>
</tr>
<tr>
<td></td>
<td>Dec. 3</td>
<td><strong>Exam 2</strong></td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
The instructor reserves the right to make course content and schedule changes as deemed necessary and appropriate at any time during the academic semester.
BCN 4871C    Commercial Construction I

Instructor:    Carol M. Woodson, Ph.D., AIC, LEED AP
OSHA Construction Outreach Trainer

Contact Info:  Office: 2114 Bldg. 50  Email: c.woodson@unf.edu  Office phone: 904-620-2746
Office Hours:  Tuesday & Thursday 3:00 – 4:00 and Wednesday 10:00am-12:00 and 2:00-4:00
Meeting Periods:  Tuesday and Thursday 1:40pm- 2:55pm  Bldg. 50 Rm 1400

Course description (from catalog)    This is the first in a two-course elective track for students preparing for careers in commercial construction. Students learn a broad perspective of the technical knowledge and skill or methods related to commercial construction projects including project management, strategic bidding and estimating, ethical conduct, project delivery methods, value engineering, design/build, customer relations and communications.

Prerequisites:  Prerequisite: BCN 3223, BCN 3611C

Objectives:    Upon completion of this course students will be able to:
• Understand the basic foundations for managing commercial projects
• Have a knowledge of project delivery methods
• Know the fundamentals of jobsite layout and coordination
• Have a knowledge of the construction documents typically used in commercial construction
• Have a knowledge of the necessary documentation and record keeping in commercial construction
• Have a knowledge of how to structure and run meetings, negotiations and dispute resolution
• Manage subcontractors and vendors typically involved in commercial construction
• Understand Time, Money, Quality, & Safety in commercial construction
• Understand the procedures and requirements for project closeout in commercial construction projects


Method: Two lecture/discussion classes per week and reading assignments. Reading assignments should be done before the class in which they are discussed. Students are responsible for the content of all reading assignments whether or not the material is covered in class. Lecture material will augment reading assignments. Students are responsible for any additional material handed out in class.

Tests:    There will be two (2) tests given during the term. (mid-term & final) Tests results must be discussed with the instructor within 48 hours after the test has been graded and returned. Makeup tests will NOT be given for unexcused absences.

Assignments:  This course is registered in Blackboard. There will be many homework assignments. Due dates will be given when the homework is assigned. All assignments are individual unless otherwise stated. In other words, no collaborating on any assignments unless expressed permission is granted by the professor. This class is structured to determine how well you think and work on...
your own. **No late assignments will be accepted…No late assignments will be accepted!!!!!!! Got it!**

Outcomes & Assessment: Final grades will be based on the following:

Each homework assignment or test is worth 100 points. The content of these will be structured to meet the objectives for this course. The total number of points earned at the end of the semester will be divided by the total sum of the assignments and tests to produce your final grade.

Grade Scale: Grades will be given according to the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points Range</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>93.101</td>
<td>A</td>
<td>76-78</td>
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<tr>
<td>89-92</td>
<td>A-</td>
<td>69-75</td>
</tr>
<tr>
<td>86-88</td>
<td>B+</td>
<td>60-68</td>
</tr>
<tr>
<td>83-85</td>
<td>B</td>
<td>0-59</td>
</tr>
<tr>
<td>79-82</td>
<td>B-</td>
<td></td>
</tr>
</tbody>
</table>

Attendance Policy: You have the responsibility to be here for class and for exams. I have the responsibility to make the class interesting, relevant, and challenging. Please contact me before the class if you are ill and cannot attend a class in order to be excused. It is the policy of the Construction Management department that students must attend 80% of the classes, it will be enforced. You are only allowed 6 unexcused absences. You are not permitted to enter the class late. It is rude and disruptive to me and your fellow classmates. **Students will conduct themselves in a professional and respectful manner at all times. Failure to do so will result in the removal from the class. I do not give grades. I will record the grade you earn.** Turn your cell phones off and put them away while in class. You may use your laptop to take notes only, no emailing or surfing the net while in class.

Honor Code: Students are expected to comply with the spirit and intent of the University Academic Honesty Policy as stated in the Undergraduate Catalogue. [Please see Undergraduate Student Handbook for all related policies and procedures. Any cheating, collaborating, or plagiarism on tests, papers or homework will result in the immediate failure of the class. Do your own work!]

Course Schedule:

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Topics</th>
<th>Reading Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to Project Management</td>
<td>Ch. 1</td>
</tr>
<tr>
<td>Week 2</td>
<td>Continued</td>
<td></td>
</tr>
<tr>
<td>Week 3</td>
<td>The Project Team</td>
<td>Ch. 2</td>
</tr>
<tr>
<td>Week 4</td>
<td>Managing People on the Job</td>
<td></td>
</tr>
<tr>
<td>Week 5</td>
<td>Ethics in Project Management in Commercial Construction</td>
<td>Ch. 3</td>
</tr>
<tr>
<td>Week 6</td>
<td>Construction Docs on the Jobsite</td>
<td></td>
</tr>
<tr>
<td>Week 7</td>
<td>Continued</td>
<td></td>
</tr>
<tr>
<td>Week 8</td>
<td>Submittals, Samples, and Shop Drawings</td>
<td>Ch. 4</td>
</tr>
<tr>
<td>Week 9</td>
<td>Continued</td>
<td>Mid Term</td>
</tr>
<tr>
<td>Week 10</td>
<td>Documentation and Record Keeping on the Jobsite</td>
<td>Ch. 5</td>
</tr>
<tr>
<td>Week 11</td>
<td>Continued</td>
<td></td>
</tr>
<tr>
<td>Week 12</td>
<td>Jobsite Layout and Control</td>
<td>Ch. 6</td>
</tr>
<tr>
<td>Week 13</td>
<td>Building the Building from Paper to Actuality</td>
<td>Ch. 7</td>
</tr>
<tr>
<td>Week 14</td>
<td>Meetings, Negotiations, and Dispute Resolution</td>
<td>Ch. 7</td>
</tr>
<tr>
<td>Week 15</td>
<td>Continued</td>
<td>Final</td>
</tr>
</tbody>
</table>

Professor reserves the right to alter the syllabus as necessary to execute the course. You will be notified in class if this happens in order to amend your syllabus.
BCN 4872C Heavy Civil Construction II

SPRING 2009

Course: BCN 4872C – Heavy Civil Construction II
Credits: 3 credits
Professor: Erin A. Jiang, Ph.D., CPC
Email: a.jiang@unf.edu
Office: 50-2120
Office Phone: 904-620-2193
Office Hours: T R 2:00PM-4:00PM
Meeting Time and Location: M W 3:00PM - 4:15PM
Textbook: Construction Methods and Management, 7/E, S.W. Nunnally, Publisher: Prentice Hall, ISBN-10: 0131716859
Reference: Heavy construction cost data, R S Means (Call number: TH435 .M429)
Course Objectives:
The course is designed to explore estimating, productivity analysis, construction methods, scheduling, and administration in the construction of heavy civil projects. Topics include
  • a structured estimating process;
  • earthwork estimating
  • construction equipment selection and cost
  • excavating and lifting
  • loading and hauling
  • compacting and finishing
  • heavy civil construction scheduling and planning
Course Outcomes:
On completion of this course students will be able to
  • describe the characteristics of heavy construction projects
  • develop a structured estimating in unit price estimating
  • select and allocate appropriate equipments for projects
  • sequence construction operations and schedule projects
  • develop heavy civil project construction site plan

Appendix B – Course Syllabi
Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 2</td>
<td>15%</td>
</tr>
<tr>
<td>Exam 3</td>
<td>15%</td>
</tr>
<tr>
<td>Homework, class exercises &amp; quizzes</td>
<td>20%</td>
</tr>
<tr>
<td>Projects</td>
<td>20%</td>
</tr>
<tr>
<td>Paper Presentation</td>
<td>5%</td>
</tr>
<tr>
<td>Attendance</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
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<tr>
<td>C</td>
<td>70 – 74</td>
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<tr>
<td>D</td>
<td>60 – 69</td>
</tr>
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<td>F</td>
<td>0 – 59</td>
</tr>
</tbody>
</table>

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<th>DATE</th>
<th>TOPICS</th>
<th>ASSIGNMENT MILESTONES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Jan 5</td>
<td>Course Outline</td>
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<tr>
<td></td>
<td>Jan 7</td>
<td>Structured estimating process</td>
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<td>2</td>
<td>Jan 12</td>
<td>Earthmoving Materials</td>
<td>Chapter 2</td>
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<td>Jan 14</td>
<td></td>
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<tr>
<td>3</td>
<td>Jan 19</td>
<td><em>No Class (Martin Luther King’s Day)</em></td>
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<td></td>
<td>Jan 21</td>
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<tr>
<td>4</td>
<td>Jan 26</td>
<td>Estimating earthwork: Mass Diagram</td>
<td>Chapter 2</td>
</tr>
<tr>
<td></td>
<td>Jan 28</td>
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<tr>
<td>5</td>
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<tr>
<td>Feb 4</td>
<td>Exam 1</td>
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<tr>
<td>Feb 9</td>
<td>Introduce Term Project</td>
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<tr>
<td>Feb 11</td>
<td>Equipment ownership and operating cost</td>
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<tr>
<td>Feb 16</td>
<td>Construction equip. cost estimating</td>
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<tr>
<td>Feb 18</td>
<td>Equipment ownership and operating cost</td>
<td></td>
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<tr>
<td>Feb 23</td>
<td>Construction scheduling</td>
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<tr>
<td>Feb 25</td>
<td>Construction scheduling</td>
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<tr>
<td>Mar 2</td>
<td>Excavating and Lifting</td>
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<tr>
<td>Mar 4</td>
<td>Excavating and Lifting</td>
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<td></td>
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<tr>
<td>Mar 9</td>
<td>Exam 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mar 11</td>
<td>Exam 2</td>
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<tr>
<td>Mar 16</td>
<td>Spring break</td>
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<tr>
<td>Mar 18</td>
<td>Spring break</td>
<td></td>
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</tr>
<tr>
<td>Mar 23</td>
<td>Loading and Hauling</td>
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<td>Mar 25</td>
<td>Loading and Hauling</td>
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<tr>
<td>Mar 30</td>
<td>Compacting and Finishing</td>
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<td>Apr 1</td>
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<tr>
<td>Apr 6</td>
<td>Construction planning</td>
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<tr>
<td>Apr 8</td>
<td>Project 2 Due</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apr 13</td>
<td>Exam review</td>
<td></td>
<td></td>
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<tr>
<td>Apr 15</td>
<td>Exam 3</td>
<td></td>
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</tbody>
</table>

**NOTES:**
1. The instructor reserves the right to make course content and schedule changes as deemed necessary and appropriate at any time during the academic semester.
2. You may choose to present the papers searched by yourself instead of using my posted paper. However, you must get my approval of your searched papers at least one week before you present them.
BCN 4873C  Commercial Construction II

Instructor: Carol M. Woodson, Ph.D., AIC, LEED AP
OSHA Construction Outreach Trainer

Contact Info: Office: 2114 Bldg. 50  Email: c.woodson@unf.edu  Office phone: 904-620-2746
Office Hours: Tuesday & Thursday 3:00 – 4:00 and Wednesday 1:00-4:00

Meeting Periods: Tuesday and Thursday 1:40pm-2:55pm  Bldg. 50 Rm 1400

Course description (from catalog) This is the first in a two-course elective track for students preparing for careers in commercial construction. Students learn a broad perspective of the technical knowledge and skill or methods related to commercial construction projects including project management, strategic bidding and estimating, ethical conduct, project deliver methods, value engineering, design/build, customer relations and communications.

Prerequisites: Prerequisite: BCN 3223, BCN 3611C

Objectives: Upon completion of this course students will be able to:

- Understand the foundations for managing complex commercial projects
- Understand the importance of ethical decision making in commercial projects
- Have a knowledge of labor and labor relations
- Understand what is project quality management
- Have a knowledge of computerized project management systems
- Have a knowledge of the necessary documentation and record keeping in commercial construction
- Have a knowledge of changes and claims in a commercial project
- Manage subcontractors and vendors typically involved in commercial construction
- Understand Time, Money, Quality, & Safety in commercial construction
- Understand the procedures and requirements for project closeout in commercial construction projects


Method: Two lecture/discussion classes per week and reading assignments.

Reading assignments should be done before the class in which they are discussed. Students are responsible for the content of all reading assignments whether or not the material is covered in class. Lecture material will augment reading assignments. Students are responsible for any additional material handed out in class.

Tests: There will be two (2) tests given during the term. (mid-term & final) Tests results must be discussed with the instructor within 48 hours after the test has been graded and returned. Makeup tests will NOT be given for unexcused absences.

Assignments: This course is registered in Blackboard. There will be a minimum of 4 homework assignments. Some of these assignments will be to demonstrate and improve your written communication skills. Due dates will be given when the homework is assigned. All assignments are individual unless otherwise stated. In other words, no collaborating on any assignments unless expressed
permission is granted by the professor. This class is structured to determine how well you think and work on your own. **No late assignments will be accepted.** No late assignments will be accepted!!!!!!! Got it!

Outcomes & Assessment: Final grades will be based on the following:
Each homework assignment or test is worth 100 points. The content of these will be structured to meet the objectives for this course. The total number of points earned at the end of the semester will be divided by the total sum of the assignments and tests to produce your final grade.

Grade Scale: Grades will be given according to the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93.102</td>
<td></td>
</tr>
<tr>
<td>A-</td>
<td>90-92</td>
<td></td>
</tr>
<tr>
<td>B+</td>
<td>86-88</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>83-85</td>
<td></td>
</tr>
<tr>
<td>B-</td>
<td>79-82</td>
<td></td>
</tr>
<tr>
<td>C+</td>
<td>76-78</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>73-75</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>72-69</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
<td></td>
</tr>
</tbody>
</table>

Attendance Policy: You have the responsibility to be here for class and for exams. I have the responsibility to make the class interesting, relevant, and challenging. Please contact me before the class if you are ill and cannot attend a class in order to be excused. It is the policy of the Construction Management department that students must attend 80% of the classes, it will be enforced. You are only allowed 6 unexcused absences. You are not permitted to enter the class late. It is rude and disruptive to me and your fellow classmates. **Students will conduct themselves in a professional and respectful manner at all times. Failure to do so will result in the removal from the class. I do not give grades. I will record the grade you earn.** Turn your cell phones off and put them away while in class. You may use your laptop to take notes only, no emailing or surfing the net while in class.

Honor Code: Students are expected to comply with the spirit and intent of the University Academic Honesty Policy as stated in the Undergraduate Catalogue. Please see Undergraduate Student Handbook for all related policies and procedures. Any cheating, collaborating, or plagiarism on tests, papers or homework will result in the immediate failure of the class. Do your own work!

Course Schedule:

<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
<th>Reading Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Jobsite Labor Relations and Control</td>
<td>Ch. 8</td>
</tr>
<tr>
<td>Week 2</td>
<td>Continued</td>
<td></td>
</tr>
<tr>
<td>Week 3</td>
<td>Personnel and Safety Management</td>
<td>Ch. 9</td>
</tr>
<tr>
<td>Week 4</td>
<td>Continued</td>
<td></td>
</tr>
<tr>
<td>Week 5</td>
<td>Subcontracting and Purchasing</td>
<td>Ch. 10</td>
</tr>
<tr>
<td>Week 6</td>
<td>Continued</td>
<td></td>
</tr>
<tr>
<td>Week 7</td>
<td>Project Quality Management</td>
<td>Ch. 11</td>
</tr>
<tr>
<td>Week 8</td>
<td>Continued Mid Term</td>
<td></td>
</tr>
<tr>
<td>Week 9</td>
<td>Time/Cost Control</td>
<td>Ch. 12</td>
</tr>
<tr>
<td>Week 10</td>
<td>Continued</td>
<td></td>
</tr>
<tr>
<td>Week 11</td>
<td>Spring Break</td>
<td></td>
</tr>
<tr>
<td>Week 12</td>
<td>Computerized Project Administration</td>
<td>Ch. 13</td>
</tr>
<tr>
<td>Week 13</td>
<td>Changes and Claims</td>
<td>Ch. 14</td>
</tr>
<tr>
<td>Week 14</td>
<td>Progress Payments</td>
<td>Ch. 15</td>
</tr>
<tr>
<td>Week 15</td>
<td>Project Closeout &amp; Other Fun Stuff Final</td>
<td>Ch 16</td>
</tr>
</tbody>
</table>

Professor reserves the right to alter the schedule as necessary to execute the course. You will be notified.
BCN 4990 Study Abroad
SYLLABUS
BCN 4990 Study Abroad France
Paris, Nantes
(Spring Break 2009) March 12 – March 22
Maximum Number of Students: 20

Instructor: Dr. Maged Malek Telephone: (904) 620-1123
Office: CCEC, Room 2400 Fax: (904) 620-2573
Email: mmalek@unf.edu

Class Hours: See course schedule
Co-leader: Mr. James J. Sorce, MBA email: james.sorce@unf.edu
Office: CCEC, Room 2304
Office Hours: TBA

I. TEXTBOOKS AND OTHER READINGS
Required: International Construction by Mark Mawhinney, Mawhin
Lonely Planet France by Nicola Williams, Steve Fallon, Oliver Berry

English to French Dictionary any will be fine

Recommended websites:
http://travel.state.gov/
http://travel.state.gov/travel/cis_pa_tw/cis/cis_1116.html
http://www.state.gov/p/eur/index.htm
http://france.usembassy.gov/

II. Study Abroad in France Course objectives/Learning outcomes:
This is a course for students preparing for a career in construction. Students will gain knowledge and skills in the
management of construction projects, including strategic bidding and estimating, ethical conduct, project delivery
methods, value engineering, asset allocation, design/build, customer relations and communications all in the context of
the French market. This course will be taught as a study abroad in France for the spring 2009 term.

Students will be exposed to issues involving construction in France. Students will study resource allocation in
construction companies located in France. The class will analyze how bidding is done, how competition interacts in the
French construction industry and how the culture of the French affects negotiations and the construction process. The
study abroad will also discuss typical construction problems related to the construction industry within France. Students
will prepare a report by collecting data, taking pictures and conducting research on key aspects of the country’s history,
culture, bidding and estimating procedures, project delivery methods, project management and other business practices.
The report will be presented by the student upon returning to the United States. Participants over all will spend 5 nights
in Paris and 4 nights in Nantes. Students will visit project sites in Paris and Nantes. Students will also visit buildings
of historical, cultural and architectural significance. Special emphasis will be placed on specific issues related to
building in France.

Learning objectives and outcomes
Upon successful completion of this course, the learner will be able to describe the management techniques of an
international construction company within the context of performing work in France. The learner will describe
bidding procedures of an international construction contractor within the context of the French culture. The learner will
describe the theory behind a Design/Build construction project and the specific issues with building in France. The
learner will illustrate the ability to identify major characteristics of the construction industry, including price structures,
competition, resources allocation, environment, and risk factors also within the context of the French culture.
III. COURSE REQUIREMENTS
Prerequisites: Approval by the Leader and co-Leader

Spouses and significant others may accompany the group if space is available (please see James Sorce for specific requirements).

Cost: The trip will cost $1500. Students must pay the cost of the trip in addition to the normal UNF tuition (3 credits). Spouses and significant others must pay full fare and must also register for at least one undergraduate credit. The cost of the trip includes airfare, in-country transportation, lodging, breakfasts (normally included with the hotel stay), at least two group meals (a lunch and a dinner, possibly during tours), and possibly a commemorative shirt.

Lodging: In order to keep the costs down, students will normally stay in double-occupancy rooms. In some cases, some rooms will not be available, requiring students to stay in groups of 3. Students must be willing to be flexible in this regard. In addition, lodging might not be up to 3-star American hotel standards in some cases. However, we will stay in clean, safe locations.

A reasonable estimate of the other “out of pocket” expenses that will be needed is $400 per student. This amount should easily cover meals, entertainment, etc.

IV. ACADEMICS: There are 4 graded components:

1. Pre-tour group presentation of history, culture, major industries of France: Students will group together and give a 30 min presentation on one of the following topics: Culture of France, history of France, major industries of France, influences of construction, history of Nantes. Each student in the group must present.

2. Participation during study tour: Punctuality, respectfulness (of everyone, but especially of the native population and customs) is required. Students are expected to be inquisitive, attentive, and participatory during all site visits. Failure to behave in the appropriate manner will result in a failing grade in the course.

3. Post-tour paper: Each student will choose a specific significant site in Paris or Nantes subject to approval by Dr. Malek. The student will be required to submit a 6-8 page paper developed from personal experience and research gathered while abroad. The paper will include, but not be limited to: brief history of project, manpower, resources, scheduling issues, bidding and estimating procedures, project delivery methods, project management, other business practices and original contractor thoughts of the project or the company’s history with the project. This paper is due by no later than April 10th by 5:00pm.

4. Post-tour group presentation: Each group will present a 30 min presentation on the construction aspect of building in France. You will need to gain information from your experience in France and do some additional research. Each group member must speak.

IV. GRADING
Students will earn grades according to the following scheme:

<table>
<thead>
<tr>
<th>Due</th>
<th>Description of Activity</th>
<th>% of Final Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Tour</td>
<td>Group Presentation</td>
<td>25%</td>
</tr>
<tr>
<td>Ongoing</td>
<td>Participation during study tour</td>
<td></td>
</tr>
<tr>
<td>Post-tour</td>
<td>Research paper 6-8 pages</td>
<td>25%</td>
</tr>
<tr>
<td>Post-tour</td>
<td>Group Presentation</td>
<td>25%</td>
</tr>
</tbody>
</table>

All presentations must utilize PowerPoint and be well-organized, informative, concise, and coherent. In addition to content, presentation style and clarity will be graded.

Grades are assigned on a 10-point scale: 90-100=A, 80-89=B, 70-79=C, 60-69=D, 0-59=F. Plus / minus grades will be used at the instructor’s discretion. All work must be done and submitted/presented on time. Any work turned in or presented late will be penalized at the rate of 25% per day against the maximum value of the work. This penalty applies regardless of the legitimacy of the excuse. In particular, computer and printer problems, whether due to hardware or software, will not get you any special treatment. There will be no exceptions. Plan ahead, back up computer work, and don’t procrastinate.

V. TRAVEL INFORMATION
Travel Documents in Paris: You will need a passport! If you do not have one you must apply for one by January 9th or you will not go on the trip.
Important: You must have a U.S. Passport. If you do not have a passport now, or have not ordered one yet, you should use an “Expediting Service” to be sure that you will have the passport in time (expensive last-minute “rush processing” charges apply---but, these services work...)

The Department of State encourages all U.S citizens traveling or residing abroad to register via the State Department’s travel registration (http://www.travel.state.gov/travel/tips/registration/registration_1186.html) website or at the nearest U.S. embassy or consulate abroad. Registration will make your presence and whereabouts known in case it is necessary to contact you in an emergency and will enable you to receive up-to-date information on security conditions.

VI. ACADEMIC INTEGRITY
UNF places high priority on and strives to uphold the highest standards of academic integrity while protecting the rights of students and faculty. Should any instructor find evidence of cheating, plagiarism, or other inappropriate assistance in work presented by a student, the instructor should inform the student of the action to be taken (UNF current catalog).

At minimum, the action I will take for any incidence of violation of academic integrity will be an F (failing grade) in the course and dismissal of the student committing the violation from the class.

VII. STUDENTS WITH DISABILITIES
Students with disabilities who seek reasonable accommodations in the classroom or other aspects of performing their coursework must first register with the UNF Disability Resource Center (DRC) located in Building 10, Room 1201. DRC staff members work with students to obtain required documentation of disability and to identify appropriate accommodations as required by applicable disability laws including the Americans with Disabilities Act (ADA). After receiving all necessary documentation, the DRC staff determines whether a student qualifies for services with the DRC and if so, the accommodations the student will be provided. DRC staff then prepares a letter for the student to provide faculty advising them of approved accommodations. For further information, contact the DRC by phone (904) 620-2769, email (kwebb@unf.edu), or visit the DRC website (http://www.unf.edu/dept/disabled-services).

VIII. CLASSROOM ETIQUETTE
Students are expected to remain polite during classroom and in-country discussions. Even during heated debates, you must treat your instructors, classmates and the locals with respect. Violation of this policy will result in a reduction of your class participation grade that, if the violation is significant enough, could result in a failing grade for the class. For example, you should not make derogatory remarks about your classmates’ ideas. Instead, explain why you think they are wrong, backing up your viewpoint with sound analysis and refraining from personal attacks. Another example is being quiet while someone else (including your instructor!) has the floor.

IX. ETIQUETTE DURING THE STUDY TOUR
While you are abroad, you are representing not only yourself, but also the College of Computing, Engineering and Construction, the Building Construction Management Department, the University of North Florida and the United States of America (and/or your native country, if it isn’t the US). Remember that any interaction that you have with the native citizens of the country you are visiting can leave a lasting impression, especially if you violate native sensibilities. Keep in mind that citizens of every nation are proud of their heritage. Therefore, when you are abroad, you should strive not just to be aware of cultural differences, but also to experience and appreciate them. Try the local foods, even if you don’t think you’ll like them. If natives are hosting you, make every effort to demonstrate that you are enjoying their cuisine, even if you are not! While many Americans view foreign foods as unhealthy, remember that the citizens of most countries are less unhealthy than Americans overall. Besides, eating different foods for a week or two really won’t kill you. View this as a chance to practice the skills that you might need someday if you become engaged in international business. However, if you are allergic to certain types of foods or you have other food restrictions you must let me know prior to the trip. Similarly, Americans are often shocked by the times that shops are open or closed (in some countries, you’ll be escorted from the store at 5:00pm, regardless of whether you’ve made your purchase). Other cultures wouldn’t think of starting dinner until 9:00pm or even 11:00pm or midnight! Local restaurants might not even be open when you are ready to eat. There are too many of these issues to discuss here, but you can prepare yourself by learning the local customs before you leave the US and then making plans (e.g., having snack food in your hotel room if dinner starts too late) if you simply don’t think that you can deal with the local customs otherwise.

During site visits, you should behave in a professional and businesslike manner. Formal business attire is typically appropriate, but nothing less than business casual is ever acceptable. Be inquisitive and show your interest in the host company, but remain respectful at all times. In general, you should never use familiar forms of address (e.g., first names) unless you are specifically invited to do so. Be sure also to know when it is appropriate for you to shake hands, etc., especially if you are female! In fact, women need to understand that they will not always be treated the same way that men are treated. You might even be treated in ways that you find offensive. Keep in mind that women’s rights have progressed much faster and more fully in the US than they have in many other countries. The bottom line is that you will enjoy the trip more and be more productive while you are abroad if you know what you will be facing before you
leave home and you are willing to be open-minded and culturally sensitive while you are abroad. Reading books about
the culture you’ll be visiting is a great way to prepare yourself.

X. ILLEGAL ACTIVITIES AND ALCOHOL POLICIES

While you are abroad, you are subject to the national, regional, and state laws of the country you are visiting. If you
violate these laws, you can expect to be apprehended, charged, tried, and (if convicted) penalized (which may include
fines, imprisonment, deportation, or other measures). It is your responsibility to know these local laws and to abide by
them. In general, behaving in a mature, civilized, and respectful manner will keep you out of trouble. Please note that
students remain subject to UNF’s academic misconduct code and all violations will be dealt with according to the UNF
process.

Since you are subject to host country laws, you may legally drink alcohol if your age exceeds the local drinking age.
Typically, the drinking age abroad is less than 21, and might even be less than 18. However, you must remember that
you are in a foreign country that you don’t know very well. You are strongly discouraged from becoming intoxicated
while you are abroad. Remember that local customs like right-of-way rules between cars and pedestrians may be quite
different than those in the U.S. If you are under the influence of alcohol, you will be more apt to forget this fact and
less able to react if you do. In fact, being hit by automobiles is the number one cause of serious injury to Americans
abroad. Also, to avoid trouble, do not drink if you are alone or with strangers, but only if you are with one (or
preferably several) people from our group.

SAFETY AND SECURITY: There are places in Jacksonville that you would not visit alone or at night. Similarly,
there are places that you should not be in every major city abroad. There might even be entire regions of the country
that you should avoid. Ask responsible locals (e.g., faculty or students associated with the program, hotel staff) and use
your common sense when you are abroad or in New York. Travel only in groups, especially at night and especially if
you are a woman. Do not go to the bathroom alone, especially in a bar (again, especially if you’re female).

We will use the buddy system at all times. You will be responsible for keeping an eye on your partners (roommates)
and watching out for them. In addition, the faculty member should know where you are at all times, especially if the
group is moving (e.g., boarding a local tram or bus, boarding a train, moving through an airport, walking through a
firm’s plant). Do not leave the group without telling the faculty member.

Pickpockets thrive in tourist zones (both abroad and in the US). If you carry a wallet, never carry it in your back
pocket, where it is easiest to steal. Put it in your front pocket and keep your hand on it. Better yet, invest a few dollars
in an alternative way of keeping your money and passport (e.g., a pouch that attaches to your belt and that you can store
inside your pants). If you carry a purse (strongly discouraged), be extremely careful. Always keep it closed. Never
carry it at your side or on your hip, as skilled pickpockets can unzip it and remove items without your knowing it. If you
carry it with the strap over your shoulder, be aware that some thieves will ride past you on a bicycle or motorcycle and
grab the strap. Not only will they get away with your purse, you are likely to be seriously injured in the process.

Thieves often work in pairs or groups. One common tactic is for one person to distract you (e.g., asking for directions,
pretending to be falling-down drunk) while others steal your valuables. This is especially effective in a crowded
subway car or in a crowded tourist area. Be on the alert in such places!

Be sure that you have a copy of the front page of your passport stored in a safe place that is separate from your
luggage. It is very difficult to get a passport replaced quickly without that page. Your instructor will also carry a
copy for you, and will leave one on file at UNF to be sure that we can get one if we need one. Be sure that you
have a list of your credit card numbers and/or travelers check numbers in a safe place that is separate from your
cards and checks.
BCN 4944 Construction Management Internship

Department of Construction Management

COLLEGE OF COMPUTING, ENGINEERING AND CONSTRUCTION

Construction Management

INTERNSHIP MANUAL

The construction industry’s leaders are at University of North Florida today and guided by one criterion - a commitment to excellence.
CM MISSION

The Department of Construction Management (CM) provides the student a program of study that prepares one for a variety of positions in the construction industry. The program consists of a management orientated technical curriculum regarding building construction, computer concepts, business and general education.

CM GOALS

To provide and maintain a high quality Bachelor of Science in Building Construction academic program which enables graduates to achieve their maximum potential in the construction management field.

To provide and maintain a strong, active relationship with the construction industry in Northeast Florida through graduates, an industrial advisory committee, and internships.

CM INTERNSHIP OBJECTIVES

The mission of the Construction Management Internship Program is to meet the challenges of the future by educating the student, supporting intellectual contributions by faculty, and assisting the construction industry. The Internship Program’s primary purpose is to prepare the construction student with leadership responsibilities in a technologically oriented, diverse, dynamic and global construction environment.

Purpose

In an effort to aid the student in developing career awareness, the Construction Management Department at University of North Florida is placing increased emphasis on career planning. An important component of this emphasis is an internship program that provides the student with opportunities to obtain actual work experience while testing the concept of the student’s chosen profession, thus assisting the student to be more certain of career objectives.

In addition, a viable internship program reinforces the student learning process. The understanding of the relationship between a course’s content and the student’s chosen profession enhances learning capabilities, resulting in improved academic skills.

The internship program also offers significant benefits to participating firms. It provides an excellent opportunity for the employer to evaluate a potential employee in the work environment. A well-designed internship program also brings to the company temporary employees who are capable of making significant and productive contributions during their tenure.

The training of a young man or woman for a successful career in the construction industry requires the combined efforts of University of North Florida and the construction business community in which the student will ultimately serve. Companies participating in the internship program support this philosophy by bridging the gap between the student’s educational training and the student’s practical experiences.
General Description

A number of construction firms in Florida have agreed to provide internship opportunities to Construction Management (CM) students in order to provide them with construction management-related work experience. Each internship agreement lasts 15 weeks, during which time the student (the Intern) is expected to work with the employer approximately twenty (20) hours per week. The employer assigns a specific Intern Supervisor to mentor the intern. The intern is required to submit bi-weekly reports and a final summary report about their work experiences. The intern earns three credit hours after they successfully complete the internship agreement. A member of the CM faculty supervises the internship program and will assign the final grade.

Each CM student must complete one (1) internship agreement as a prerequisite to earning a Building Construction degree. Each student may indicate their personal preference regarding the nature of the internship position and the internship company. The faculty member will assist students in finding an internship opportunity, but ultimately it is the student’s responsibility to secure an internship job.

If a student possesses and exhibits extensive construction administration work experience, the student may petition/request to take additional course work in lieu of the internship credit hours as an alternative.

Program Objectives

The primary objective of the internship program is to provide CM students with an opportunity to observe and/or participate in all aspects of construction management that are typically encountered in the construction work place.

The instructional intent of the internship is, first, for the intern to develop an overall understanding of the different managerial processes regarding construction contract administration at both the construction site and at the home office. The intent is to introduce the intern to the various administrative requirements for each and how such processes vary. Second, the intern will be introduced to the costing system creating costing structures, the construction schedules and budgetary controls. Finally, the intern should attempt to integrate and utilize classroom gained knowledge and apply same to situations presented via the work experience.

Expected outcomes of the CM Internship Program

As a result of participation in the program, the student should:

- Be able to identify different leadership skills and styles

- Be able to define and demonstrate a broader understanding of the different construction operation processes and the processes of contract administration
3/4/2011

- Be able to assess and evaluate personal managerial strengths and weaknesses

- Be able to evaluate career alternatives

- Be able to demonstrate succinct written and oral communication skills

- Be able to demonstrate analytical decision-making skills
Procedures and Responsibilities

For the CM Faculty Member:

1. Assist the student in selecting the internship employer/supervisor to ensure that the internship is an appropriate and desired work experience.
2. Advise the Intern and the Intern Supervisor of the program expectations, and requirements such as creating the internship goal assessment criteria.
3. Monitor the progress of the student by reviewing their weekly timesheets and work experience reports.
4. Assign a final grade based on the faculty member’s and Intern Supervisor’s evaluation and other factors as defined by the course syllabus and the Internship Manual.

For the Intern Supervisor:

1. A specific construction manager, rather than the construction firm, is responsible for the overall internship experience. This person is designated as the student’s Intern Supervisor; however, this does not preclude a student intern from working with other construction managers where and when necessary to expand the Intern’s work related experience.
2. The Intern Supervisor and the Intern will create a list of specific objectives for the internship, including assessment criteria that will form the basis for evaluating successful completion of the internship agreement between the Intern Supervisor and the Intern.
3. The Intern Supervisor should be available for consultation, with both the Faculty Advisor and the Intern, regarding the internship placement process, ongoing progress, and final evaluation.
4. The Intern Supervisor must sign the intern’s work experience report before it is submitted to the faculty member. Although each Intern is expected to work a minimum of twenty hours during the internship agreement period, it is not necessary that the length of the internship be confined to twenty (20) hours per week. If the Intern desires to work more than twenty (20) hours per week, and the Intern Supervisor agrees to this, then the intern may do so. The intern must understand, however, that only three (3) semester credit hours may be credited towards the student’s baccalaureate degree.
5. The Intern Supervisor should strive to provide the Intern with as many different kinds of experiences and responsibilities in construction management as the placement will allow. These opportunities, for example, might include (but are not limited to) observing or perhaps performing (under supervision) field supervisory tasks, drafting letters to an owner, architect, subcontractor, or vendor, negotiating contracts, and drafting contract documents.
6. During the internship, the Intern Supervisor should contact the faculty member should any problems arise with the Intern’s work performance.
7. At the completion of the internship agreement, the Intern Supervisor will evaluate the Intern’s work. The faculty member will provide an evaluation form. Brief comments on the positive and negative aspects of the student intern’s performance are encouraged. The evaluation should be submitted the last week of the internship.

For the Intern:

1. At the beginning of the semester, the faculty member will provide each student with information about the available internships. The student may indicate a preference for a particular category and a particular construction manager and firm with whom he or she would like to work. Students can even arrange their own internships on an ad hoc basis (especially if an opportunity for a future employment agreement exists!), but final approval rights are still reserved by the faculty member.
2. Where necessary, the faculty member will make a preliminary match of the student with an Intern Supervisor. Final placement ultimately depends upon the acceptance of the student by the Intern Supervisor.
3. The actual work experience schedule shall be negotiated between the Intern Supervisor and the Intern. All issues relative to work schedules, rate of compensation, school vacations, and holidays shall be resolved between the Intern and Intern Supervisor.
4. The Intern will submit a typed work experience report to the faculty member that has been signed by the
intern Supervisor. A standard form will be provided for this purpose. The report should list the nature of the previous period’s work experiences and include at least one “insightful” observation related to the nature of “leadership and/or management styles of construction managers”. These “insights” will form a partial basis for the required final summary report. The faculty member must receive the report by 4:00pm on the Wednesday following each period being reported. The purpose of the report is to ensure that the Intern is participating in meaningful and varied management-related work experiences.

5. The last week of the semester the intern will submit to the Faculty Advisor a summary report about the Intern’s work experiences focused on the “lessons learned”. The faculty member will provide the report content and format requirements separately to the intern. In addition to “satisfactory” performance on the job (as evaluated by the Intern Supervisor), the Intern will be expected to produce a “thoughtful, insightful, and comprehensive” summary report that addresses both the “lessons learned” about specific management methods and processes and observations/conclusions about “leadership and management styles of construction managers”.

6. The intern must register for the Internship course and pay tuition and fees (for 3 credit hours) for the academic term during which the internship work is being performed. Internship credit will not be granted retroactively; the student must have the internship approved in advance.

**Academic Advisor Contact Information**

Mr. James J. Sorce MBA Advisor and Instructor Department of Building Construction Management
College of Computing, Engineering, and Construction University of North Florida 4567 St. Johns Bluff Road, South Building 50, 2304 Jacksonville, Florida 32224-2645 James.sorce@unf.edu (904) 620-2759

**TO THE EMPLOYERS:**

*Please know that the UNF Department of Construction Management sincerely appreciates your interest and support of the Building Construction Management Internship Program—THANKS!*
CONSTRUCTION MANAGEMENT INTERNSHIP AGREEMENT

Intern’s Name______________________________________
N#_____________________________________

Intern’s Address_____________________________________________________________________________
_ (Street/P.O. Box) (City) (State) (Zip)

Intern’s Phone Number ___________________ E-mail___________________________________

Employer____________________________________________________ Phone Number_____________________

Employer’s Address_______________________________________________________________________
______) (Street/P.O. Box) (City) (State) (Zip)

Intern Supervisor’s Name_____________________________________ Title _______________________________

Intern Supervisor’s Contact Information
Phone ________________________
Fax ________________________
E-mail________________________________________

Internship Starting Date_________   Ending Date__________

Intern’s Rate of Compensation_________________ Hours to be worked per week__________

INDUSTRY FEE

A fee of $400 is requested from the Intern employer. These funds are used to help defray Internship program expenses such as faculty travel to employers and other CM program enhancements. The check should be made out to the University of North Florida. The check should be mailed to Dr. Maged Malek, Department of Construction Management, University of North Florida1 UNF Drive, Building 50 room 2400 Jacksonville, FL 32224-2645.
RESPONSIBILITIES OF THE INTERN

1. The Intern is required to complete a minimum of 300 hours (15 weeks * 20 hours) of work in an approved position, plus any other requirements specified by the course syllabus and/or Internship Manual.
2. The Intern’s rate of compensation is to be negotiated between the Employer and the Intern.
3. A grade will be assigned that is contingent upon a “satisfactory” evaluation by the Intern Supervisor, as well as completion of all other requirements specified by the course syllabus and/or Internship Manual.
4. Each intern will maintain regular contact with the Faculty Advisor by submitting a bi-weekly work report (signed by the Intern Supervisor) to the faculty member. The Intern is also required to present an initial list of their personal objectives for the internship (developed in coordination with the Intern Supervisor) and a final summary report on their work experience.
5. The Intern is subject to the jurisdiction of all rules, regulations, and codes of conduct affecting students at University of North Florida, as well as those that the employer may require.
6. The Intern must maintain confidentiality with regard to sensitive business information gained in the work environment.

RESPONSIBILITIES OF THE CM FACULTY MEMBER

1. Provide the Intern and Intern Supervisor with a pre-internship orientation, maintain regular interactions with both parties to assure that the learning objectives are being achieved, and conduct the final evaluation of the internship based on input from the intern supervisor and reports submitted by the Intern.
2. Provide the participating employer/supervisor with appropriate instruments for evaluating the student.
3. Assist the student in developing topics for appropriate research projects, readings, and written papers relating to the internship experience.

RESPONSIBILITIES OF THE PARTICIPATING EMPLOYER AND INTERN SUPERVISOR

1. The Employer should assign a specific Intern Supervisor to work directly with the student to achieve the educational goals of the internship by assigning appropriate work duties.
2. The Intern Supervisor and the Intern will create a list of specific objectives and assessment criteria for the internship that will form the basis for evaluating “satisfactory completion” of the internship.
3. Provide the student with an orientation to the work-site duties, hours, and employer/supervisor expectations.
4. Schedule regular meetings with the Intern and provide ongoing feedback about the Intern’s performance.
5. Provide a safe and secure workplace at which the Intern has the opportunity to meet his/her educational objectives.
6. At the completion of the internship agreement, the Intern Supervisor will evaluate the Intern’s work performance. The Intern Supervisor will complete the “Confidential Evaluation Form” (provided by the faculty advisor) and will provide brief comments on the positive and negative aspects of the Intern’s performance. The evaluation form should be submitted during the last week of the internship.

This agreement is subject to any specified educational objectives, duties, learning outcomes, and evaluation methods that may accompany this agreement or are included in the Internship Manual.
INTERN SUPERVISOR’S EVALUATION

CONSTRUCTION MANAGEMENT INTERNSHIP

INTERN’S NAME _____________________________

EMPLOYER _____________________________

INTERN SUPERVISOR _____________________________

INTERNSHIP STARTING DATE_________   ENDING DATE__________

CERTIFICATION _________________________________________________________________

   (Signature of the Intern Supervisor)   (Date)

INSTRUCTIONS

The principal value of an internship is derived from the practical work experience, and this evaluation will be an important consideration in assessing overall performance of the Intern. (Other aspects of the internship will be evaluated by the Faculty Advisor).

Please check the appropriate column for each item. General or specific comments on how the Intern can improve their own performance (especially those related to professionalism, leadership and management style, etc.) are especially appreciated. We are also very interested in suggestions for improving the effectiveness of our BCM internship program.

This evaluation will be kept confidential. The Faculty Advisor will use your input to make general suggestions aimed at improving the professionalism of the Intern.

THANK YOU for taking the time and effort to mentor your Intern.

INTERN’S NAME _____________________________

INTERN SUPERVISOR’S NAME _____________________________
<table>
<thead>
<tr>
<th></th>
<th>Excellent</th>
<th>More than Satisfactory</th>
<th>Satisfactory</th>
<th>Needs to Improve</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to work with all types of people.</td>
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<tr>
<td>Ability to think and reason logically.</td>
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<tr>
<td>Ability to understand and solve construction problems.</td>
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<tr>
<td>Ability to make sound economic decisions.</td>
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<tr>
<td>Ability to communicate clearly and concisely, both oral and written.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are computer literate And Internet capable.</td>
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<td></td>
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<tr>
<td>Knows and upholds ethical standards of the field.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepared for successful entry into the construction industry.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential to be a leader in the construction industry and in the community.</td>
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</tr>
</tbody>
</table>

**OVERALL RATING OF INTERN**

____ Excellent
____ More than Satisfactory
____ Satisfactory
____ Needs to Improve
____ Unsatisfactory

INTERN’S NAME _____________________________________________

INTERN SUPERVISOR’S NAME _____________________________________________
SUGGESTIONS AND COMMENTS

For improving performance and professional growth of Intern:

For improving the internship program:

PLEASE MAIL OR FAX EVALUATION FORM TO:

Dr. Mag Malek, Professor and Chair
Department of Construction Management
College of Computing, Engineering, and Construction
University of North Florida
4567 St. Johns Bluff Road, South
Jacksonville, Florida  32224-2645
mmalek@unf.edu
(904) 620-2683 (office)
(904) 620-2573 (fax)
The Intern will submit a weekly report using the template shown below. A digital format version will be provided to the Intern. The report must be typed and then signed by both the Intern and the Intern Supervisor. The weekly report must be submitted to the Faculty Advisor by close of business on Tuesday of the week following the report week.

Department of Construction Management
COLLEGE OF COMPUTING, ENGINEERING, AND CONSTRUCTION

INTERNSHIP WEEKLY TIME AND ACTIVITY REPORT

Intern’s Name______________________________________

Week of: ________________________________________

Hours worked during this week: __________________

Date Received by Faculty Advisor: _______________

________________________________________________

Section I: Description of specific work experiences during this week and their relationship to construction management.

Section II: Observations and insights related to the nature of “leadership and/or management styles of construction managers”.

________________________________________________

Intern’s Signature ________________________________

Intern Supervisor’s Signature ________________________
C. EXAMPLE ASSESSMENT SURVEYS

1. American Institute of Constructors Exam
2. Graduating Senior Survey (Spring 2010/Fall 2009/Summer 2009)
3. Industry Evaluation of Intern Performance (Spring 2010/Fall 2009/Summer 2009)
5. Construction Management Industry Advisory Council Survey (Fall 2009/Fall 2008)
6. ISQ (Individual Student Questionnaires)
7. Alumni Survey
American Institute of Constructors Exam

Beginning fall 2009, all graduating seniors are required to take the American Institute of Constructors (AIC) exam, the Associate Constructor (AC) or the Certified Professional Constructor (CPC). The (AIC) exam results will provide an additional measure on the effectiveness of the program in terms of how well the students have mastered the Educational Outcomes from the CM academic program. It also serves as a basis of comparison of the UNF CM academic program to other construction management academic programs.
To Whom It May Concern:

This letter is to certify that the University of North Florida is a testing site for the AIC Level 1 AC Certification Examination, as well as the AIC Level 2 CPC Certification Examination.

Please do not hesitate to contact our national headquarters if you have any questions or concerns.

Sincerely,

[Signature]

Anne R. Ashurst
AIC & UCC Program Coordinator
**Appendix C – Sample Surveys**

The examinations will be given in the following locations. Indicate your choice of center on your Application in the space provided. The list below is current as of the time that this booklet was printed. Locations may change from time to time without notice. The CBD will contact you if you have selected a test site that is no longer available.

Please visit [www.ContractorCertification.org](http://www.ContractorCertification.org) for the most up-to-date listing of test sites.

<table>
<thead>
<tr>
<th>Location Code</th>
<th>Institution Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB001</td>
<td>University of Akron</td>
</tr>
<tr>
<td>AD001</td>
<td>Auburn University</td>
</tr>
<tr>
<td>AK001</td>
<td>John Brown University</td>
</tr>
<tr>
<td>AR001</td>
<td>University of Arkansas-Maine</td>
</tr>
<tr>
<td>AZ001</td>
<td>Arizona State University</td>
</tr>
<tr>
<td>AZ002</td>
<td>Northern Arizona University</td>
</tr>
<tr>
<td>AZ003</td>
<td>Arizona State University-Flagstaff</td>
</tr>
<tr>
<td>CA001</td>
<td>California Polytechnic State University</td>
</tr>
<tr>
<td>CA004</td>
<td>California State University-Sacramento</td>
</tr>
<tr>
<td>CA005</td>
<td>California State University-Northridge</td>
</tr>
<tr>
<td>CO001</td>
<td>Colorado State University</td>
</tr>
<tr>
<td>CO003</td>
<td>Colorado State College</td>
</tr>
<tr>
<td>CT001</td>
<td>Central Connecticut State University</td>
</tr>
<tr>
<td>FL002</td>
<td>University of Florida</td>
</tr>
<tr>
<td>FL003</td>
<td>University of North Florida</td>
</tr>
<tr>
<td>FL004</td>
<td>Florida State University</td>
</tr>
<tr>
<td>FL005</td>
<td>University of Northern Florida</td>
</tr>
<tr>
<td>FL006</td>
<td>Florida State University-Flagstaff</td>
</tr>
<tr>
<td>IL001</td>
<td>Illinois State University</td>
</tr>
<tr>
<td>IL002</td>
<td>Southern Illinois University-Edwardsville</td>
</tr>
</tbody>
</table>
| IN003         | Indiana State University 
| KS002         | Kansas State University |
| KY001         | Eastern Kentucky University |
| LA002         | Southeastern Louisiana University |
| MA003         | Louisiana State University |
| MI001         | University of Michigan |
| MI002         | Eastern Michigan University |
| MI003         | Michigan State University |
| MI004         | Michigan State University-Midland |
| MD001         | University of Maryland-Eastern Shore |
| MD002         | The University of Maryland-Baltimore County |
| MD003         | University of Maryland-College Park |
| MD004         | University of Maryland-College Park- Hospital Campus |
| MN001         | Minnesota State University-Mankato |
| MN002         | University of Minnesota-UMD |
| MS001         | Mississippi State University |
| MS002         | Mississippi State University-University Park |
| MS003         | Mississippi State University-University Park-Extension |
| MO001         | Missouri State University |
| MO002         | University of Missouri-Columbia |
| MO003         | University of Missouri-Columbia-Extension |
| MO004         | University of Missouri-Columbia-Extension-Online |
| MO005         | University of Missouri-Columbia-Extension-Online-International |
| MO006         | University of Missouri-Columbia-Extension-Online-International-Web Only |

Additional locations may be added as needed. Please check the website [www.ContractorCertification.org](http://www.ContractorCertification.org) for the most up-to-date information.
INTRODUCTION

The Department of Construction Management (CM) has a program of self-assessment and continuous improvement. As part of this assessment program, CM graduating seniors are requested to complete a survey on their educational experience at the University of North Florida. The following is a summary of the survey input received from the 2010 Spring CM graduating seniors.

The results of this survey and others are compiled into a white paper for the Department. This white paper serves as a basis for the CM faculty to enter into deliberations during the course of the spring and summer. These deliberations result in faculty approved proposed changes for the CM program in the next academic year. A majority of the CM faculty must be in favor of the proposed change. Approved Departmental changes are submitted to the university community via the Faculty Association approval process. Proposed changes that receive approval by the Faculty Association and the University are then implemented in the following Fall.

Thirty-nine (39) graduating seniors participated in the Spring 2010 survey. The following are the student views from those surveys.

ADVISING

CM students were asked to rate various aspects of Advising by assigning a rating of:

5 - Strongly Agree
4 - Agree
3 - Neutral
2 - Disagree
1 - Strongly Disagree
0 - Not Applicable

<table>
<thead>
<tr>
<th>Rating</th>
<th>Helpful advice in developing my Program of Study.</th>
<th>Helpful advice in selecting courses for each term.</th>
<th>Advice in career preparation was helpful.</th>
<th>Sought advice from my advisor often.</th>
<th>Sought advice from CM faculty often.</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>18</td>
<td>15</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
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<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Appendix C – Sample Surveys
Often spoke with faculty concerning the profession. 3 13 17 5
1 0

Suggestions to improve the advising process:

• Advise students to plan further ahead.
• Career service personnel are not familiar with industry companies
• Do not change schedules after initial posting; dropped classes, time changes, cancelled classes took me an extra semester to get my degree.
• Give Mr. Sorce some help.
• Little is given in terms of advice on how to seek jobs other than “career fair”
• Make courses harder and more applicable
• Make it more easily accessible to get advised
• More familiarity with content of classes and requirements of central classes
• More on site field trips; more hands on experience
• Offer every class every term to avoid conflicts w/prerequisites.
• The advisor should not be so busy – perhaps more than one would help

FACILITIES

CM students were asked to rate various aspects of Facilities by assigning a rating of:

5 - Strongly Agree
4 – Agree
3 – Neutral
2 – Disagree
1 – Strongly Disagree
0 - Not Applicable

0

CM computing facilities were sufficient. 4 17 11
6 1 0

Equipment for CM classrooms was sufficient. 3 12 12 11
1 0

The classrooms were sufficient. 9 22 8 0
0 0

The library was sufficient. 19 16 4 0 0
0

Suggestions to improve the CM Facilities:

• Computer labs on third floor need to be open longer and have printers that can print from Ozzie bucks; maybe a printer or two just for CM students; more computer labs and printing stations with extended hours
• Drafting tables for drawing and projects needed
• More hands on equipment for surveying

Appendix C – Sample Surveys
• More lab opportunities: 5; Utilize labs for more hands on activities
• More updated equipment and computer programs, especially for scheduling; Include BIM; Update software to that used by construction companies; Updated equipment
• Room 2006 is great for our program; keep it at all costs.

SUPPORT PROGRAMS

The number of CM students taking advantage of the following:

<table>
<thead>
<tr>
<th>Program</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC Student Club</td>
<td>0</td>
</tr>
<tr>
<td>AGC Student Club Competition</td>
<td>0</td>
</tr>
<tr>
<td>AGC Student Club</td>
<td>1</td>
</tr>
<tr>
<td>Const Management Assoc Club</td>
<td>12</td>
</tr>
<tr>
<td>Const Specification Inst Club</td>
<td>0</td>
</tr>
<tr>
<td>Employment Showcase</td>
<td>30</td>
</tr>
<tr>
<td>Hard Hat Banquet</td>
<td>0</td>
</tr>
<tr>
<td>NEFBA Student Club</td>
<td>25</td>
</tr>
<tr>
<td>Sigma Lambda Chi</td>
<td>9</td>
</tr>
</tbody>
</table>

CM students were asked to rate various aspects of Support Programs by assigning a rating of:

5 - Excellent
4 – Good
3 – Average
2 – Poor
1 – Did Not Participate
0 - Not Applicable

<table>
<thead>
<tr>
<th>Program</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC Student Club</td>
<td>-</td>
</tr>
<tr>
<td>AGC Student Club</td>
<td>-</td>
</tr>
<tr>
<td>AGC Student Club Competition</td>
<td>-</td>
</tr>
<tr>
<td>Const Management Assoc Club</td>
<td>13</td>
</tr>
<tr>
<td>Const Specification Inst Club</td>
<td>21</td>
</tr>
<tr>
<td>Employment Showcase</td>
<td>5</td>
</tr>
<tr>
<td>Hard Hat Banquet</td>
<td>0</td>
</tr>
<tr>
<td>NEFBA Student Club</td>
<td>3</td>
</tr>
<tr>
<td>Sigma Lambda Chi</td>
<td>10</td>
</tr>
<tr>
<td>Const. Specifications Inst. Club</td>
<td>0</td>
</tr>
<tr>
<td>Const. Management Association Club</td>
<td>7</td>
</tr>
<tr>
<td>Hard Hat Banquet</td>
<td>0</td>
</tr>
</tbody>
</table>

Suggestions to improve the CM Support Programs:

Appendix C – Sample Surveys
- ASHE was the most well run club, tons of events and community outreach
- Better leadership from faculty to keep clubs sustainable
- Couldn’t participate in any due to full time employment
- Greater accountability within the clubs needed
- Have a Hard Hat banquet
- It would help if more than one even existed; Make students more aware of opportunities; More faculty involvement; instructors need to get behind the clubs and push them; Past student clubs held more events, i.e., fishing tournaments. This is a great way to raise money and get industry people involved.
- More faculty support to help clubs transition from year to year
- More Sigma Lambda Chi events
- Put people in charge that know what they’re doing
- The university should be responsible for paying the $60 Sigma Lambda Chi fee.

**CURRICULUM**

CM students were asked to rate various aspects of the CM Curriculum by assigning a rating of:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Excellent</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
<th>Did Not Participate</th>
<th>Not Applicable</th>
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<table>
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<tr>
<th>Course</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCN 1210 Const. Materials</td>
<td>3</td>
<td>13</td>
<td>10</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>BCN 1210L Const. Mtls Lab</td>
<td>2</td>
<td>8</td>
<td>11</td>
<td>7</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>BCN 1252 Const. Drawing</td>
<td>4</td>
<td>7</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>BCN 2280/4284 Survey &amp; Constr. Layout</td>
<td>4</td>
<td>12</td>
<td>8</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCN 2405 Intro to Structures</td>
<td>7</td>
<td>18</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>BCN 3012 History of Const.</td>
<td>5</td>
<td>16</td>
<td>11</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCN 3223 Soils &amp; Foundations</td>
<td>10</td>
<td>19</td>
<td>7</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCN 3224 Superstructures</td>
<td>15</td>
<td>11</td>
<td>7</td>
<td>4</td>
<td></td>
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</tr>
</tbody>
</table>

Appendix C – Sample Surveys
• **Capstone:** 2, disorganized and vague assignments; have a better project
• **Computing:** spend some time on AutoCAD, but slower demo and working with P3 or other programs would be ideal; was a waste of time; interim teacher was unprepared; use more relevant software
• **Design and Codes:** (Prof. Darm): exams/tests did not allow enough time to complete; more assignments given based on small section of reading from the code book; in class q&a

• **Drawing:** learned from the book mostly; would liked to have more real drawings and done a couple of quantity takeoffs; should be more focused on teaching how to read plans.

• **Estimating I, II, Capstone:** recycle same material from one class to the other.

• **Estimating:** Dryden is a great man, yet incapable as a teacher and highly unorganized; have a competent teacher; coursework is a joke; get someone who can estimate and has career experience; professor lacked knowledge of estimating experiences; couldn’t explain into details when questions were asked; lectures should be more organized; should cover more info; received little/no feedback on assignments; AIC study guide has useful info for this class; more specific problems in estimating

• **Faculty:** Instructors should have better knowledge of the material and take class seriously by teaching and caring about the material.

• **History:** Less writing, more quizzes; All classes should relate more towards the real world of construction.

• **Internship:** cannot decipher the instructions for the bi-weekly essays; needed more feedback from internship reports; don’t ask for money

• **Harder coursework**

• **Heavy Civil II:** Start the Kiewit/Heavy civil project sooner in the semester

• **Mech/Electrical:** poorly organized class; assignments were vague; communication barrier

• **Scheduling:** Please update the scheduling, planning into using current scheduling and planning computer programs.

• **Study abroad:** party like an American tourist abroad!; more site visits

• **Superstructures/techniques:** all the materials required for class were not relevant to the course; pictures don’t do justice-make that class in the lab; Superstructures: monotonous and uninteresting

• **Surveying:** could use an intro into the GPS equipment used; up to date real life equipment needed; have a teacher that shows up; more equipment and use it more often, earlier in the semester; have a surveying company rep speak to the class

**Student comments on Most Beneficial courses were:**

• **Admin/Econ:** helped prepare me for the business world in construction; had good instructor; relevant to industry
• Commercial II: teaches theories and techniques used in the field; excellent professor (Birkelbach) gave real life advice; fun class projects, open forum discussion, great book assigned (21 Laws of Leadership)

• Construction materials, surveying, structural system, soils (Jackson, Johnson, Shabla & Soares) were the best classes offered as the material covered was directly related to my summer internships

• Contracts & Docs: Mr. Sorce taught this and “gave a damn about the subject”; Mr. Sorce related to real life situations; provides great start to many contract documents

• Estimating: expanded my knowledge of Excel which will be valuable; the instructor before Dr. Dryden, the professor actually taught estimating

• Green: Dr. Woodson was very informational, learned a lot about the subject

• Heavy Civil II: Heavy civil: more hands on, more about heavy civil rather than detailed equipment calculations

• Internship: Internship is where I learned the most and got experience and my job through it

• Safety – learned OSHA regs and received OSHA card; teaches theories and techniques used in the field

• Scheduling: Scheduling had good instructor; relevant to industry; good teacher, P3 is pointless; very important part of any future job

• Seminars helped me understand business world better

• Shabla’s structural systems most informative, challenging of the program, taught real world problem solving skills; Shabla’s structures

• Soils/Foundations: I learned the most in this class. I loved it! boring subject taught excellently (Dr. Hudyma); Soils: 4 (Soares)

• Structural Systems: 7, Shabla is bright, demonstrates concepts, holds additional study sessions, tough class but rewarding; Structural systems was toughest class and I learned the most; learned a lot, challenged; thoroughly enjoyed it

• Structures: 2 – applicable and taught by competent professors

• Study abroad – learned about the way people live their lives

• Techniques: 3, practical; provides great overview of building systems

**Student comments on Least Value courses were:**

Capstone: did not do anything of value
Capstone: I was doing two bid proposals at the same time; one for Capstone and one for Heavy Civil II; The Heavy Civil was harder and hands on and I learned most about bid proposals in that class; Capstone was unnecessary
Computing: I knew everything that was in the curriculum; refresher course to an Intro to Computers course; only covered Excel spreadsheets, not extensive at all
Drawing: Course as an absolute joke, should be one of the most important courses of the program and it was a joke; Only worked ½ day with CAD; didn’t draw; barely looked at plans

Appendix C – Sample Surveys
Dryden, any course: not a good teacher
Estimating I and II: not impressed with the curriculum from either estimating course, instructions were unclear and finals were not challenging; did not give sufficient techniques and instructing; needs serious help; did not build on Est. I and was limited; did not give sufficient techniques and instructing; didn’t learn about estimating; didn’t learn anything in this class as it was a review of estimating; we just wrote a proposal; Estimating professor does not know what he is teaching; Estimating/Capstone: Too much irrelevant discussion of not CM related material; too many canceled classes; lacking in organization, content and communication; unorganized; incompetent instruction; didn’t learn about estimating
Green courses: -All had value but some just had to be taught by fellow students or myself; if you take I & II you should be prepared to take LEED test
History: 5, not relevant to the real world; didn’t provide any worth, felt like a filler class
Materials: I didn’t get anything out of it 4 years ago; instructor deviated from course content and talked about random topics
Scheduling/Planning: could not understand the professor, language barrier; unorganized, not practical; didn’t get/retain much from it
Soils: too in-depth and we’ll never need to know all that info
Structural systems, due to teacher
Surveying: a complete joke; learned nothing and it is especially disturbing that we were never able to use a total station; more time with equipment

Student comments on Recommended Curriculum Changes were:

- AIC exam – more emphasis, it should be incorporated into the curriculum and should have been the focus all semester in the Capstone class; Actual erection of buildings and what steps to take in the whole process
- Capstone: AIC test for Capstone – get rid of it; continue Capstone presentation projects
- Estimating: major role in construction and I feel I have learned nothing except what I have taught myself from the text; we just wrote a proposal; we did no estimating.; estimating is important and we need it for the AIC exam; it would have been helpful to be taught; Estimating, estimating, estimating; most important thing in construction and it’s the worst thing in our program; Cost estimation is a critical class and we leave here ill prepared
- Faculty: Some professors did not take the class seriously, so neither did the students
- Program: General level of difficulty of the program should be higher; Less redundancy throughout the program; too much recycling and overrun of information; More industry speakers (2); More online/video courses; Need more effective communication/feedback on part of faculty; Tougher classes: 1; more Hands on experience: 3;; Site visits/field trips: Mandatory field trips is essential; Whole system needs
to be redone; Wouldn’t change anything; Teachers should expect more of students; Technical writing course; better writing skills should be incorporated into the program

- **Survey**: more hands on with equipment; make equipment accessible for students to check out; Surveying and codes are crucial; instructors had no interest in teaching nor did they care about the students
- **Technology/Computing**: additions to computing to include BIM that will make us an up to date program; Incorporate BIM; More computer software/equipment; Scheduling needs updated software; not P3
- **TLO Industrial** – add another class like this

## EDUCATIONAL OUTCOMES

CM students were asked to rate their education in terms of meeting CM Educational Outcomes by assigning a rating of:

5 - Strongly Agree
4 - Agree
3 - Neutral
2 - Disagree
1 - Strongly Disagree
0 - Not Applicable

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<td>Have the ability to think and reason logically.</td>
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<td>Have the ability to understand and solve construction problems.</td>
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<td>Have the ability to make sound economic decisions.</td>
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<td>Ability to communicate clearly/concisely, both orally &amp; written.</td>
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<td>Are computer literate and Internet capable.</td>
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<td>Know and uphold ethical standards of the field.</td>
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<td>Are prepared for successful entry into the construction industry.</td>
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<td>22</td>
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<td>Have the ability to lead in the const. industry and community.</td>
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**Student comments on Educational Outcomes:**

Appendix C – Sample Surveys
• I wish some important classes were actually challenging students’ ability.
• More hands on work
• more project management software
• More time learning computer applications would help in getting a job
• teach relevant material

**OPINIONS**

**Why study at UNF?**

• Location: 17
• BCM program ranking/reputation: 7
• Cost/economics: 4
• Small class size/value for education: 3
• Majors offered: 2
• Alumni spoke highly of the department; Alumni told me UNF grads held to higher standards
• Couldn’t get in to UF
• Friend

**Was the CM program what you thought it would be?**

-Yes (17)  -No (14)

**If you had to do it over, would you still choose UNF?**

-Yes (23)  -No (9)

**Would you still choose Construction Management?**

-Yes (27)  -No (6)

**What one thing would you change in the CM program?**

• Block scheduling would add level of cohesion for students/faculty; students would advance through program as a group which would enable development of a thesis type project and end with each student having a portfolio of work and a physical project completed by graduation
• **Faculty:**
  • Bring back professors (Jackson) who have extensive, relevant construction experience
  • Check out instructors
  • Fire certain professor
  • Fire Dryden for his lack of experience, maturity, professionalism displayed daily in his classroom
  • Get better teachers.
  • Hire competent professors who can speak English well
• I would like to see a few changes in faculty
• Industry professional professors
• Let retired project managers advise/teach instead of just engineers
• Make sure they can teach the class they’re teaching
• Monitor professors who teach
• More professors
• More teachers like Shabla and Woodson who are knowledgeable about the subject and have been in the field
• Replace some of the professors
• There are a couple of GREAT teachers (Sorce, Shabla), the rest need to be replaced
• Wider variety of professors
• **Curriculum.**
• Field Trips/Job Sites (Add more): 4, More field trips; more industry leaders speaking to students
• Hands On: 7
• More industry speakers
• More online courses; Courses being offered in a timely manner
• Program: Higher expectations of students; tougher program; Make program more competitive

*Other comments?*
Fall 2009 Graduating Senior Survey Summary

Department of Construction Management

INTRODUCTION

The Department of Construction Management (CM) has a program of self-assessment and continuous improvement. As part of this assessment program, CM graduating seniors are requested to complete a survey on their educational experience at the University of North Florida. The following is a summary of the survey input received from the 2009 Fall CM graduating seniors.

The results of this survey and others are compiled into a white paper for the Department. This white paper serves as a basis for the CM faculty to enter into deliberations during the course of the spring and summer. These deliberations result in faculty approved proposed changes for the CM program in the next academic year. A majority of the CM faculty must be in favor of the proposed change. Approved Departmental changes are submitted to the university community via the Faculty Association approval process. Proposed changes that receive approval by the Faculty Association and the University are then implemented in the following Fall.

Nineteen (19) graduating seniors participated in the Fall 2009 survey. The following are the student views from those surveys.

ADVISING

CM students were asked to rate various aspects of Advising by assigning a rating of:

5 - Strongly Agree
4 - Agree
3 - Neutral
2 - Disagree
1 - Strongly Disagree
0 - Not Applicable

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<td>Helpful advice in developing my Program of Study.</td>
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<td>Helpful advice in selecting courses for each term.</td>
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<td>Advice in career preparation was helpful.</td>
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Appendix C – Sample Surveys
Often spoke with faculty concerning the profession.  

**Suggestions to improve the advising process:**

- Address prerequisite issues for transfer students (1)
- Advising process needs to be less abstract, more consistent advising system to make sure students get schedules set up in an efficient way (1)
- Advising seems to be working fine for me, in terms of selecting/registering for classes (1)
- Maybe another advisor or faculty can help with the process registering for classes (1)

**FACILITIES**

CM students were asked to rate various aspects of Facilities by assigning a rating of:

5 - Strongly Agree  
4 - Agree  
3 - Neutral  
2 - Disagree  
1 - Strongly Disagree  
0 - Not Applicable

CM computing facilities were sufficient.  
Equipment for CM classrooms was sufficient.  
The classrooms were sufficient.  
The library was sufficient.

**Suggestions to improve the CM Facilities:**

- Soundproof 50/2006 and add drop down ceilings; add sound deadening material to some 1400s rooms (1)
- Update computer software to current industry standards(1)

**SUPPORT PROGRAMS**

The number of CM students taking advantage of the following:

ABC Student Club 0

Appendix C – Sample Surveys
CM students were asked to rate various aspects of Support Programs by assigning a rating of:

5 - Excellent
4 - Good
3 - Average
2 - Poor
1 - Did Not Participate
0 - Not Applicable

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**Suggestions to improve the CM Support Programs:**

- Provide more information about professional organizations/programs/clubs and make the information easier to find (1)
- More interactive program with community activities; pursue activities that will build BCM image in community (1)
- More funding to maximize programs, field trips, casual outings (1)
**CURRICULUM**

CM students were asked to rate various aspects of the CM Curriculum by assigning a rating of:

- 5 - Excellent
- 4 – Good
- 3 – Average
- 2 – Poor
- 1 – Did Not Participate
- 0 - Not Applicable

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Appendix C – Sample Surveys
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</table>

**Student comments on the 3-Average and 2-Poor Courses were:**

- Construction Materials - more hands on time in labs (5)
- Drawing - More drawing, less technical writing, more reading of complex plans (7)
- Surveying – Cover more material (1)
- History of Construction – offer updates on grades (1)
- Techniques - add classroom activity & visual aids (1)
- Estimating - Return homework assignments in more timely manner; offer tutoring, less group work, more individual work (1)
- Construction Computing – Incorporate more construction programs, including BIM & ArchiCAD (5); less basic MS Word, Excel, PowerPoint (3)
- Capstone – more industry assistance (1)
- Scheduling – more current software, more industry input (1)
- More nationalized testing (AIC, LEED, GC license) (1)
- More field visits and industry interaction (3)

**Student comments on Most Beneficial courses were:**

- Commercial Construction I & II was mentioned most often (10)
• Estimating I & II (5)
• Contracts/Documents (5)
• Capstone (4)
• Admin/Economics (4)
• Structures/Superstructures (4)
• Construction Safety (3)

**Student comments on Least Value courses were:**

• Estimating I & II (10)
• Computing (5)
• Drawing I (3)

**Student comments on Recommended Curriculum Changes were:**

• More hands on; more lab time (10)
• More nationalized tests – AIC, LEED, OSHA, GC License
• AIC exam – structure program around the study guide for the AIC exam
• Drawing needs to teach reading complex plans
• Fewer group projects; more individual projects; difficult to meet with several course groups, do internship and attend classes; too many group oriented courses – difficult logistically to meet with different groups
• Human relations course re interactions w/subs and stakeholders
• More advanced technology/programs
• Internship – need more experience during internship
• Estimating needs more input from industry professionals.
• Focus on how to build structures
• More testing/evaluating construction materials
• More use of CM Lab
• Scheduling needs more industry input
• Technical writing courses needed

**EDUCATIONAL OUTCOMES**

CM students were asked to rate their education in terms of meeting CM Educational Outcomes by assigning a rating of:

5 - Strongly Agree
4 – Agree
3 – Neutral
2 – Disagree
1 – Strongly Disagree
0 - Not Applicable

Appendix C – Sample Surveys
Have the ability to work with all types of people. 13 5 1
Have the ability to think and reason logically. 11 7 1
Have the ability to understand and solve construction problems. 9
Have the ability to make sound economic decisions. 7 9 3
Ability to communicate clearly/concisely, both orally & written. 11
Are computer literate and Internet capable. 16 2 2
Know and uphold ethical standards of the field. 15
Are prepared for successful entry into the construction industry. 7
Have the ability to lead in the const. industry and community. 6

Student comments on Educational Outcomes:

-Technical writing courses
-Increased exposure to the construction industry and help solve construction problems to benefit the company and the community.
-I believe the greatest qualities I have gained are the ones I have learned through internships

OPINIONS

Why study at UNF?

-Location, proximity to home (11)
  -UNFs reputation and size (4)
  -Recommendation of industry representative (1)
  -Recommendation of former chair, Dr. Adcox (1)
-Number of construction related companies in the area (1)
  -recommendation of a friend (1)
  -CM course offerings (1)

Was the CM program what you thought it would be?

-Yes (13) -No (5)

If you had to do it over, would you still choose UNF?

-Yes (13) -No (2)

Would you still choose Construction Management?
What one thing would you change in the CM program?

- More site visits, more real world application.
- Improvement in technology and programs.
- More classes, more professors, more time options
- More construction, hands on, labs (2)
- Co-ops, internships
- Stricter professors
- Fewer groups

Other comments?

- I enjoyed the teachers and the family I found in my classmates
- I would like to thank all my professors for the education they gave me.
Summer 2009 Graduating Senior Survey Summary
Department of Construction Management

INTRODUCTION

The Department of Construction Management (CM) has a program of self-assessment and continuous improvement. As part of this assessment program, CM graduating seniors are requested to complete a survey on their educational experience at the University of North Florida. The following is a summary of the survey input received from the 2009 Summer CM graduating seniors.

The results of this survey and others are compiled into a white paper for the Department. This white paper serves as a basis for the CM faculty to enter into deliberations during the course of the summer and early fall. These deliberations result in faculty approved proposed changes for the CM program in the next academic year. A majority of the CM faculty must be in favor of the proposed change. Approved Departmental changes are submitted to the university community via the Faculty Association approval process. Proposed changes that receive approval by the Faculty Association and the University are then implemented in the following Fall.

Nineteen graduating seniors participated in the Summer 2009 survey. The following are the student views from the summer survey.

ADVISING

CM students were asked to rate various aspects of Advising by assigning a rating of:

5 - Strongly Agree
4 – Agree
3 – Neutral
2 – Disagree
1 – Strongly Disagree
0 - Not Applicable

Helpful advice in developing my Program of Study. 8 8 2 0 0 1
Helpful advice in selecting courses for each term. 5 12 1 0 0 1
Advice in career preparation was helpful. 3 5 10 0 0 1
Sought advice from my advisor often. 4 5 7 2 1 0
Sought advice from CM faculty often. 4 4 7 3 0 1
Often spoke with faculty concerning the profession. 4 5 5 4 0 1

Suggestions to improve the advising process:

- Try to get students involved early in college. I took pointless classes like Earth Science and Bio and then I had to take two more sciences (physics) because I was unaware of the prereqs.
- No, it is great.
- Let the Instructor/Advisor be a teacher and find him a replacement to take care of advising.
- Enthusiasm.
- The UNF online system for registering for classes is poor. To insure you actually get a course you want students will register for everything they possibly can, flood the wait lists, and then drop what they don’t want at the beginning of the semester. UF has a system with no wait list, where classes become immediately available as students drop them. This allows everyone to change their courses slowly, constantly improving them, and does not effectively make the whole system stagnant like at UNF. Also, despite knowing exactly what courses I had to take every semester I would have a hold on my account to see an advisor. This is ridiculous. Unless you are in
academic trouble you should be able to register for whatever you need. Also, I was constantly having trouble with my credits from other schools not being recognized as prerequisites at UNF, as they had not been put into the system.

- Don’t make students feel like they are visiting their HMO doctor.

**FACILITIES**

CM students were asked to rate various aspects of Facilities by assigning a rating of:

- 5 - Strongly Agree
- 4 – Agree
- 3 – Neutral
- 2 – Disagree
- 1 – Strongly Disagree
- 0 - Not Applicable

<table>
<thead>
<tr>
<th>Facility</th>
<th>Rating</th>
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<tr>
<td>CM computing facilities were sufficient.</td>
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<tr>
<td>Equipment for CM classrooms was sufficient.</td>
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<tr>
<td>The classrooms were sufficient.</td>
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</tr>
<tr>
<td>The library was sufficient.</td>
<td>11</td>
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</table>

**Suggestions to improve the CM Facilities:**

- CM needs computer labs.
- Try to get teachers to use the labs on the first floor.
- CM needs more funding and better classrooms/equipment. CM students only have 1 lab, and the lab has no computers. The computer room we were allowed to use with engineering students does not even have a functional printer. FCCJ has much better computers and equipment that than UNF. The engineering program has a lot of labs and equipment. I do not feel that the construction students are as well equipped as the students in other colleges.
- Printers and more learning computer programs (BIM, AutoCad, Quick Books, etc).
- The CM room on the second floor could use some sound deadening and some computers. Until it is quiet in there, and especially has some computing power, students will not start to use it as their hub. (Editor’s note – the room is being sound proofed.)
- I wish we could have more hands on experience with project management software like Expedition, estimating software like On-Screen takeoff, and more experience with P#.
- Fix computing facilities and classroom equipment.
- Build a CM facility.

**SUPPORT PROGRAMS**

The number of CM students taking advantage of the following:

<table>
<thead>
<tr>
<th>Program</th>
<th>Count</th>
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<tbody>
<tr>
<td>ABC Student Club</td>
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<td>AGC Student Club</td>
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<td>Employment Showcase</td>
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<td>NEFBA Student Club</td>
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<tr>
<td>Const Specification Inst Club</td>
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<td>Const Management Assoc Club</td>
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</tr>
<tr>
<td>Sigma Lambda Chi</td>
<td>7</td>
</tr>
<tr>
<td>Hard Hat Banquet</td>
<td>2</td>
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</tbody>
</table>
CM students were asked to rate various aspects of Support Programs by assigning a rating of:

- 5 - Excellent
- 4 – Good
- 3 – Average
- 2 – Poor
- 1 – Did Not Participate
- 0 - Not Applicable

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<td>5</td>
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</table>

Suggestions to improve the CM Support Programs:

- Host a Hard Hat banquet every spring.
- Offer more notice of clubs and notice of availability of student involvement in non-student chapter local associations.
- CMA meetings were always during class times. Try to work out a better schedule for meetings.
- Only bring to the Showcase who might be hiring, not completely full and just simply taking resumes. –Bring back CMA for the students! Developed students in a positive way and introduced companies that may not have been otherwise considered from the students.
- More visibility. Until now I did not know that half of those clubs were offered at our school.
- More info about these clubs. Wish I knew more about them.
- It’s risky, but forcing students to get involved may spark their interest in the club and ultimately the program as a whole.
- Start the planning Hard Hat banquet in time to actually have it for the graduating seniors.

CURRICULUM

CM students were asked to rate various aspects of the CM Curriculum by assigning a rating of:

- 5 - Excellent
- 4 – Good
- 3 – Average
- 2 – Poor
- 1 – Did Not Participate
- 0 - Not Applicable

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BCN 3762 Design & Codes 1 10 3 4 0 1
BCN 3782 Intro to Const. Computing 1 5 7 2 4 0
BCN 4284 Survey 4 1 4 3 2 3
BCN 4475 Structural Systems 16 2 1 0 0 0
BCN 4591C Mechanical & Electrical Systems 6 9 2 2 0 0
BCN 4587 Envir Issues in Land Dev. & Const 1 2 0 0 8 8
BCN 4594C Green Const & Sustainability I 4 6 5 2 1 2
BCN 4612 Adv. Cost Estimating 3 4 7 5 0 0
BCN 4708 Documents & Contracts 4 8 6 1 0 0
BCN 4709 CM Capstone Projects 2 8 4 2 1 1
BCN 4720 Const. Scheduling 3 9 4 3 0 0
BCN 4730 Const. Safety 4 10 2 1 0 1
BCN 4752 Site Analysis & Development 0 0 0 0 9 10
BCN 4758 Housing & Land Development II 0 0 0 0 8 11
BCN 4772 Const Admin. & Economics 5 8 1 0 0 5
BCN 4751C Housing & Land Development I 0 0 0 0 7 12
BCN 4587C Green Const. & Sustainability I 2 5 1 2 5 4
BCN 4870C Heavy Civil Const. I 1 1 0 0 10 7
BCN 4870C Heavy Civil Const. II 2 2 0 0 7 8
BCN 4873C Commercial Const. II 4 1 0 0 8 6
BCN 4871C Commercial Const I 4 1 0 0 8 6
BCN 4931 Independent Study 2 0 0 0 9 8
BCN 4944 CM Internship 10 3 0 1 3 2
BCN 4990 CM Study Abroad 4 0 0 0 3 12

Student comments on the 3-Average and 2-Poor Courses were:
-Stay on topic, get more class involvement.
-Getting better professors to teach it.
-The material in some classes just did not seem important or practical for construction. Some of it was very repetitive.
-Const Mtls Lab – hands on experience with more materials; Internship – be made aware of requirements when entering course.
-Const Safety – course was on line and teacher would not teach, students were assigned chapters to teach class in a presentation and it was hard to follow anything; Materials – we hardly went to lab and all we talked about all semester was concrete; Estimating courses were a joke, I had to teach myself out of a poor text book; Surveying – taught over the summer with an instructor that was not into the class; Drawing – learned how to look over drawing and specs but I hear that UF students had to draw plans, should we do the same; Intro to Computing – it was the same stuff we learned in CGS 1570,did not learn anything new.
-Courses were entirely too easy.
-Better professors who know more about the subject.
-More hands on would be beneficial; more site visits would improve our knowledge.
-Const Computing – it was a sales pitch for const software; it should be designed to teach how to use common software such as P#, Heavy Bid and especially scheduling; Contracts – get law professor; Green II – les theory and more practical approach; Const Mtls – did not really focus on materials; Const Drawing – teach more plan reading, how to navigate through a set of drawings.
-History – could have done more than watching history channel; Const Computing – every class was a sales pitch, did not cover MS project; Mech & Ele – too much theory and not enough practical content, we learned nothing about reading MEP drawings, MEP submittals or MEP quality control. Nothing practical about being a project manager; Estimating I & II – no structure, nothing about const. equipment, nothing about creating an estimate combining quotes fro subcontractors to get a complete estimate; Scheduling – no emphasis on understanding the construction process, teacher did not have a good understanding of construction.
-Different professor.

Appendix C – Sample Surveys
- Level of detail and depth is insufficient. Technical classes too juvenile. Some people can pass a class when they can barely add or conceptualize more complete ideas. It drags down the degree integrity.
- Survey – one instrument per group, not enough practice; Const Computing – felt like we were being sold a product each class; scheduling and Estimating II – teacher could have been more helpful.
- Some more real world activities and some better teachers.
- Estimating is sub par.

**Student comments on Most Beneficial courses were:**
- Commercial Const. gave me a real life experience; Internship should be mandatory (Editor’s note – it is), that is the only reason I was hired by Skanska. They were able to test me out.
- I would say the estimating classes, both commercial classes, heavy civil 2, scheduling and safety were most beneficial. These classes will benefit me in the CM field.
- Courses most beneficial were structural systems, commercial I, soils & foundations, internship, scheduling, heavy civil ii. These courses had very knowledgeable professors that gave hands on experience or had material that I felt would be important, e.g. understanding a building system, a foundation, project equipment needs to get efficiency.
- Scheduling – methods of operation and software that is in use; estimation I & II – fundamental estimating techniques and a simulated semester project; commercial – putting together an RFP and presentation in a real/simulated scenario.
- Structural systems – teacher helps you understand how everything relates to real world.
- Green Const – teacher was great.
- Green Const, Safety, Docs & Contracts, and Structural Systems – the teachers were great.
- Const Mtls – foundation for all courses; Internship – I learned the most.
- Mech & Ele Sys, scheduling and structural sys – great teachers.
- Contracts & Docs, Const Techniques and Const Admin & Economics – good material and teachers.
- BCN 4594C, 4708, 4730, 4772, and 4990 – teacher;
- Study abroad – real world.
- Contracts, design & codes.

**Student comments on Least Value courses were:**
- Docs & Contracts should have been taught by a law professor.
- Const. Computing had the least value. I did not learn anything. The professor who taught this class is no longer here.
- I think the course curriculum is very good but not as difficult as I would have expected.
- Contracts & Docs and Design Codes. These classes had just really boring material that really just did not sink in. I felt that we did not go into fine detail with codes and discussing contracts.
- History of Const – 99% of information was not pertinent.
- Codes – worthless, I could have bought the FI Building Codes book and gone through it myself; Computing – I learned excel and word in a previous class.
- Estimating – professor did not know what the subject half the time.
- Scheduling and Adv Estimating – felt like I did not learn anything.
- Internship – gave me first hand experience in the real world.
- I believe they were all valuable.
- Const Drawing computing, and mtls – these three were way short of what they should have taught us.
- Lots of great professors in program but some are not so good.
BCN 4284, 3782, 4612, and 4720 – felt like I did not learn all that I could have.
- Estimating – learned more from HGTV.
Student comments on Recommended Curriculum Changes were:
- Service learning; more hands on in classes.
- I think the curriculum is fine the way it is.
A terminology course would be good for students because there is a lot of it in construction and it is kind of overwhelming when you get to a site and discover you have to look up a lot of terms to know what is going on.
- More student clubs and student competitions with classes dedicated to the particular competition.
- Add courses about BIM and Project Management software.
- More exposure to computer tools used in CM, e.g. scheduling, estimating and document programs.
- Better teachers would be beneficial.
- Estimating, scheduling and lab courses.
- Teach more about what we need to know and less about teacher’s lives and book stuff that we will never use.
- More course options.
- There should be a plan reading course, it is harder than it looks; bring in more technology that is being used in the field.
- A course on relevant computer software and a course on plan reading.
- More equipment and change some teachers.
- More on-site involvement.
- I would like the attendance removed. Some students work and have difficulty always making class.; Professor should be expert enough to not to have to read power point that just summarize the purchased material.
- Make Admin. Management a requirement.
- Estimating – very important to understand cost basics and how it relates to job.

EDUCATIONAL OUTCOMES

CM students were asked to rate their education in terms of meeting CM Educational Outcomes by assigning a rating of:

5 - Strongly Agree
4 – Agree
3 – Neutral
2 – Disagree
1 – Strongly Disagree
0 - Not Applicable

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Rating</th>
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<tr>
<td>Have the ability to work with all types of people.</td>
<td>13</td>
</tr>
<tr>
<td>Have the ability to think and reason logically.</td>
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</tr>
<tr>
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<tr>
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<td>11</td>
</tr>
<tr>
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<td>Know and uphold ethical standards of the field.</td>
<td>14</td>
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<tr>
<td>Are prepared for successful entry into the construction industry.</td>
<td>9</td>
</tr>
<tr>
<td>Have the ability to lead in the const. industry and community.</td>
<td>9</td>
</tr>
</tbody>
</table>

Student comments on Educational Outcomes:
- My suggestions for curriculum changes is what would have helped me achieve better skills and abilities to prepare me for a construction job.
-Increased time with scheduling software and presentations. Multiple classes I have been in have students reading word for word their PowerPoint presentations to the class. Some of them are using words that they can barely pronounce because they do not know what they mean and then they are getting a B.
-Wish I could have learned more in estimating.
-The CM program needs to get more involved with the community, bringing back service learning.
-I believe there needs to be more of an emphasis on public speaking.

**OPINIONS**

*Why study at UNF?*
- The relative small class size and the tuition.
- I heard their CM program was one of the best in Florida. Also the school was located in a major city that was still growing and had many opportunities for employment.
- Wanted to get away from Orlando and UCF. I did not want to attend FSU just to party. Could not get into UF and probably would not go there anyway. I wanted to be at a quiet school by the beach.
- No limited access to the construction management program.
- Location of school as well as "uniqueness".
- Location.
- Availability of CM degree.
- They had the major I wanted.
- Campus and I played soccer at UNF.
- Born and raised in Jacksonville. Wanted to pursue CM. Perfect fit.
- Course schedule.
- Location/hometown.
- Closest to my home.
- Other than UF, UNF was the only other construction school that I wanted to attend in Florida.
- Wanted construction management at a university and there were only three in Florida at the time of entering school.
- I moved to Jacksonville. I decided to finish my education. UNF was the only university locally that offered a degree in Construction Management.
- I wanted to get a construction management degree.
- It was close to home.
- There were not many CM programs available in Florida, and it was in the area I wanted to be in.

*Was the CM program what you thought it would be?*
- Yes.
- Yes, they prepared me very well for my job. I have been hired by Skansak USA and will be working on the Shands Hospital in Gainesville.
- I did not know I was getting into the CM program until I got here but I think it was a very good program to study.
- It fell short.
- Yes, somewhat.
- No.
- Less than expected.
- Yes, it was good.
- Yes, until economic difficulties unfolded.
- Yes and more. I thought some courses were going to be extremely tough but the professors eased my nervousness and were more than willing to help out of class.
- Not as difficult.
- No.
- School is school to me, either at UNF or somewhere else. I just don't like school. We spend so much time in school and spend so much money and I don't feel that I learned much at all. I get

Appendix C – Sample Surveys
good grades and I do all that is asked of me, however, I learned more working in construction for
2 years then I learned in school all the time that I have been here.
-For the most part it was.
-I didn’t know what to expect, but I really enjoyed it and would do it all over again.
-It was more than I thought it would be.
-It was ok but teachers need to have real world experience.
-Yes,

*If you had to do it over, would you still choose UNF?*
-Yes.
-Yes I would because of the network in Jacksonville.
-I would definitely choose UNF again. I love this place.
-No, I would go to UF.
-Yes.
-Yes.
-Yes.
-Yes, more practical knowledge. Need to get back to more community involvement and hands on
learning.
-Yes.
-Yes, UNF CM is better than UF CM.
-Yes, had a great time.
-No.
-Yeah, why not.
-Probably not.
-Yes.
-Considering the Univ. of Southern Calif. Is so expensive, I would have to say so, yes.
-Yes.
-Yes.
-Yes.

*Would you still choose Construction Management?*
-Yes, CM for life.
-Absolutely, I am starting with a salary higher than most college graduates and I am doing what I
love.-Yes, I would choose construction because I think I am going to love my job in the near
future. I do not think I would say that in any other occupation.
-No, I would have stuck with mechanical engineering.
-Probably.
-Maybe.
-Yes.
-Yes.
-Yes.
-Yes.
-Considering the Univ. of Southern Calif. Is so expensive, I would have to say so, yes.
-Absolutely.
-Yes.
-I don’t think so.
-Yes.
-Yes.
-Yes.
-There are so many things I would do over again if I had the chance. But, since I can not change
the past, I would still choose Construction Management.
-Yes.
-Yes.

*What one thing would you change in the CM program?*
-Stability.

Appendix C – Sample Surveys
-There should be more presentations to better prepare ourselves for industry.
-Some teachers are very good at teaching and some need to find something else to do.
-Different teachers from different schools or other areas, such as mathematics, science, business or even CM need to sit in on the lectures of CM students. Then they need to evaluate the students and the professors. If you can not change the professors at least hopefully sculpt the bad ones.
-A better overall focus on teaching what is relevant to construction management. There are a few loose strings that could use some attention.
-More use of actual construction documents in classes.
-A few specific teachers.
-More hands on with students in the field.
-It needs a masters program.
-Better professors.
-To teach what we need to know.
-More that one time option for every class.
-More hands on and site visits.
-I can not say.
-More hands on training.
-Have better teachers and decrease the teacher turn over rate.
-More preparation for exam/licensing in construction profession. Advising and input on the direction of study to take based on wants, needs, abilities of individual students.

Other comments?
-We need more hands on experience in the construction industry.
-I am so glad I am graduating from UNF. The school has grown so much since I have been here and it really shows that there is a promising future for the school. I am excited that my diploma will say UNF.
-I enjoyed my time at UNF and I have learned a lot. I would recommend this school to anyone and hope to keep close contact with teachers in the program.
-I loved the program but a few things need to be changed.
-Thanks for an awesome 4 years. Good luck with the program in the future. I hope to be a part of it some way.
-Get the appropriate faculty to teach the appropriate courses.
-No, besides hate doing surveys.
Introduction

In the spirit of self-assessment and continuous improvement, beginning in the fall 2002 the CM student intern performance evaluations were modified to include the CM Educational Outcomes. The construction firms with Interns are asked to assess CM students based on their job performance versus the CM Program Expected Educational Outcomes. This is a direct overall measure by the construction industry of the effectiveness of the CM academic program in training students to meet the CM Program Expected Educational Outcomes.

CM Expected Educational Outcomes

The Expected Educational Outcomes for the CM academic program are…

1. Have the ability to work with all types of people.
2. Have the ability to think and reason logically.
3. Have the ability to understand and solve construction problems.
4. Have the ability to make sound economic decisions.
5. Have the ability to communicate clearly and concisely, both oral and written.
6. Are computer literate and Internet capable.
7. Know and uphold ethical standards of the field.
8. Are prepared for successful entry into the construction industry.
9. Have the ability to lead in the construction industry and community.

Participating Construction Firms

The firms sponsoring these CM Intern students were…

Concrete Advantage Contracting  Register Construction
Consolidated Contracting Corp.  Spatial Concepts, Inc.
Coppedge Enterprises  St. Johns Housing Partnership
F & G Construction  Stellar
Jaguar Builders of Jax.  Stephen Shouppe Enterprises
JEA  TCI Construction
Manson Construction

Appendix C – Sample Surveys
Summary of Construction Industry Evaluations

There were 17 interns; 15 Intern job performance evaluations were returned; results in terms of the CM Program Educational Outcomes were:

<table>
<thead>
<tr>
<th>Educational Outcomes</th>
<th>Excellent</th>
<th>More Than Sat</th>
<th>Sat</th>
<th>Needs to Improve</th>
<th>Unsat</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work with people</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Think/reason</td>
<td>6</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Understand/solve</td>
<td>3</td>
<td>9</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Sound economic</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Communicate</td>
<td>5</td>
<td>6</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Computer literate</td>
<td>12</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Ethical</td>
<td>8</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. Prepared</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9. Ability to lead</td>
<td>6</td>
<td>5</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overall Evaluation</td>
<td>8</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Observations and Conclusions

Some observations on the construction industry evaluations are:

- Overall, it appears that CM students are ranked excellent or more than satisfactory overall against the CM Expected Educational Outcomes.
- CM students received high marks in terms of their ability to work with people, in computer literacy, and ethics.
- Interns rated during this term need to improve their ability to understand and solve construction problems and in communication skills.

Additional Industry Feedback

Improving the Intern’s Performance & Professional Growth
- The student is more suited to a field environment.
- Continued exposure to bid solicitation, analysis/evaluation process.
- Exposure to new vs renovations, site work, clearing, multiple level construction.
- Business administration/management in the field
- Begin internship earlier in training to provide more time to familiarize intern with different aspects of the company and its work.
- Intern needs better focus, follow instructions better
- Improve verbal communication skills.
- Intern works hard to understand and complete assignments; needs more field time, more Excel and technical writing; would like to have him back next term.
- Intern is a fine person and well on his way to being a professional.
- Intern needs improved listening, organization and follow through.
- Intern needs to slow down, take time to think through solutions; develop communication skills.
Improving the Internship Program

- Faculty site visits to intern site would benefit faculty, employer and intern by experiencing “latest state of the industry.”
- Scheduling conflicts.
- Need more time with the intern.
- Inform supervisor of student’s classes, labs, etc., to be more familiar with the training the intern has had.
- The program is mutually beneficial to employers, student, UNF.
- Faculty would benefit from actually seeing what students are learning, then reinforcing it in the classroom.
- Inform supervisor of specific competencies the university would like the student to gain experience in.
- Require internships at a wider range of construction organizations.
- Provide hiring companies specific goals for intern to complete/be exposed to.
Introduction

In the spirit of self-assessment and continuous improvement, beginning in the fall 2002 the CM student intern performance evaluations were modified to include the CM Educational Outcomes. The construction firms with Interns are asked to assess CM students based on their job performance versus the CM Program Expected Educational Outcomes. This is a direct overall measure by the construction industry of the effectiveness of the CM academic program in training students to meet the CM Program Expected Educational Outcomes.

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5. Have the ability to communicate clearly and concisely, both oral and written.
6. Are computer literate and Internet capable.
7. Know and uphold ethical standards of the field.
8. Are prepared for successful entry into the construction industry.
9. Have the ability to lead in the construction industry and community.

Participating Construction Firms

The firms sponsoring these CM Intern students were…

Allstate Construction
Century Builders
Coppedge Enterprises
David Weekly Homes
Habijax
Haskell
Ivey Mechanical
Manson Construction
Sauer Inc.
SNS General Contractors
Superior Construction
Superior Construction
**Summary of Construction Industry Evaluations**

The 17 Intern job performance evaluation results in terms of the CM Program Educational Outcomes were:

<table>
<thead>
<tr>
<th>Educational Outcomes</th>
<th>Excellent</th>
<th>More Than Sat</th>
<th>Sat</th>
<th>Needs to Improve</th>
<th>Unsat</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work with people</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Think/reason</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Understand/solve</td>
<td>2</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Sound economic</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Communicate</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Computer literate</td>
<td>8</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Ethical</td>
<td>8</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. Prepared</td>
<td>7</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9. Ability to lead</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overall Evaluation</td>
<td>10</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Observations and Conclusions**

Some observations on the construction industry evaluations are:

- Overall, it appears that CM students perform fairly well against the CM Expected Educational Outcomes.
- CM students received high marks in terms of their ability to work with people, in computer literacy, and ethics.
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**Additional Industry Feedback**

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- The student is more suited to a field environment.
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-Need more time with the intern.
-Inform supervisor of student’s classes, labs, etc., to be more familiar with the training the intern has had.
-The program is mutually beneficial to employers, student, UNF.
-Faculty would benefit from actually seeing what students are learning, then reinforcing it in the classroom.
-Inform supervisor of specific competencies the university would like the student to gain experience in.
-Require internships at a wider range of construction organizations.
-Provide hiring companies specific goals for intern to complete/be exposed to.
Industry Evaluation of Intern Performance – Summer (August) 2009

Construction Management Program Assessment

Recent Intern Evaluations by Construction Firms

Introduction

In the spirit of self-assessment and continuous improvement, beginning in the fall 2002 the CM student intern performance evaluations were modified to include the CM Educational Outcomes. The construction firms with Interns are asked to assess CM students based on their job performance versus the CM Program Expected Educational Outcomes. This is a direct overall measure by the construction industry of the effectiveness of the CM academic program in training students to meet the CM Program Expected Educational Outcomes.

CM Expected Educational Outcomes

The Expected Educational Outcomes for the CM academic program are…

10. Have the ability to work with all types of people.
11. Have the ability to think and reason logically.
12. Have the ability to understand and solve construction problems.
13. Have the ability to make sound economic decisions.
14. Have the ability to communicate clearly and concisely, both oral and written.
15. Are computer literate and Internet capable.
16. Know and uphold ethical standards of the field.
17. Are prepared for successful entry into the construction industry.
18. Have the ability to lead in the construction industry and community.

Participating Construction Firms

The firms sponsoring these CM Intern students were…

<table>
<thead>
<tr>
<th>Bechtel Corp.</th>
<th>Walt Disney World</th>
<th>E. Vaughn Rivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC &amp; C Home Dev.</td>
<td>Auld &amp; White</td>
<td>Coppedge Enterprises</td>
</tr>
<tr>
<td>Manson Const.</td>
<td>Archer Western Enterprises</td>
<td>Brankel Enterprises</td>
</tr>
<tr>
<td>Paul Jacquin &amp; Sons</td>
<td>F &amp; G Construction</td>
<td>JSL Company</td>
</tr>
<tr>
<td>Superior Construction</td>
<td>James Shelton Roofing</td>
<td>Clancy Theys Construction</td>
</tr>
<tr>
<td>E. Kelly Enterprises</td>
<td>Bovis Lend Lease</td>
<td>Turner Construction</td>
</tr>
<tr>
<td>Hensel Phelps Construction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary of Construction Industry Evaluations

The 21 Intern job performance evaluation results in terms of the CM Program Educational Outcomes were…

<table>
<thead>
<tr>
<th>Educational Outcomes</th>
<th>Excellent</th>
<th>More Than Sat</th>
<th>Sat</th>
<th>Needs to Improve</th>
<th>Unsat</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Work with people</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Think/reason</td>
<td>11</td>
<td>7</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Understand/solve</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Sound economic</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>5. Communicate</td>
<td>13</td>
<td>2</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Computer literate</td>
<td>13</td>
<td>6</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Some observations on the construction industry evaluations are:

- Overall, it appears that CM students perform fairly well against the CM Expected Educational Outcomes.
- CM students received high marks in terms of their ability to work with people and in their communication and computer skills.
- This period some CM students could improve on their economic and problem solving skills.
- One CM student Intern had difficulty in the work environment.

Additional Industry Feedback

Improving the Intern’s Performance & Professional Growth
- The student has shown the ability to survey an opportunity and determine what corrections should be made to enhance the outcome. The student became a leader of this department which is composed of ~100 people. The student needs more construction exposure to enable a complete understanding of our work processes and schedules.
- Showing the Intern that just completing a task without knowing if time or money could have been saved if there was a different way to perform the task. The Intern really focused on his work. Taking time to ask if this is what he wants to do helps build his confidence. The Intern is a great worker.
- Intern needs to continue to be committed to his internship and treat it like a career.
- Great Intern, very focused but needs greater knowledge of construction documents and the technical side of construction.
- Needs time in construction industry to develop.
- Intern will not say no to anyone who needs help. The increased workload leads to increased stress which impacts job performance. Intern needs to develop techniques to deal with stress.
- Intern needs more time and experience. Has the potential to be a great PM.
- Recommend that Intern have more training in the field to learn the application side of construction. Intern needs to study CSI codes and review construction dictionary.
- Intern took a lot of time off. We would not have allowed this of a regular employee.
- Intern shows great work ethic and eagerness to learn. He has shown excellent improvement in his ability to perform in the construction field.
- Intern is intelligent and will learn through additional internships. However, the Intern needs to improve in understanding project flow, communication skills and be self driven.
- Intern needs to gain more knowledge of contracts, submittals and day-to-day hands on construction experience.
- The Intern did an admiral job for us this summer. He currently asks for additional responsibilities, understands large and small cost issues, and gets along well with others. The Intern needs to improve on his written communication skills.
- Intern needs more time on the job. He is a great worker and will do well.
Improving the Internship Program
-The CM student came here with a good background. However, if the program could provide more real life experience such as field trips, the student would have unparalleled material for the construction industry.
-It would be nice to hear from the school on how the Interns are doing. Only the word of the Intern is what we go by in order to help them.
-Longer Internship to have enough time to gain experience.
-Add more internships to program.
-I found the internship program to be well suited. Well done.
-Set clear goals for Intern to achieve during internship.
-Excellent program.
-Construction work in the field is demanding, but it is an important part of the learning process.
-The Intern could do well if he committed himself to the job.
-The evaluation form is very broad and all encompassing. Adding a section specific to the summer work may be beneficial to the Intern. Our internship program is based on finding an area that the student is most interested in such as PM, field supervision or pre-construction and them placing the intern with a mentor in that field.
Spring 2010 CM Industry Survey Results

INTRODUCTION

The Department of Construction Management (CM) has implemented a formal program of self-assessment and continuous improvement. As part of this process, surveys are conducted periodically with different stakeholder groups who are involved with the CM academic program.

The chair of the department receives the surveys. The results are compiled by the chair and shared with the faculty, staff, administration and various stakeholder groups such as the CM Advisory Council. This information is used in the annual summer self-assessment of the program and curriculum conducted by the CM faculty and staff. Academic program changes are formally processed within the university each fall.

13 members from Industry took part in the spring 2010 survey at the Spring 2010 CCEC Employer Showcase. The results of the survey follow.

1. VIEW OF CM EDUCATIONAL OUTCOMES

The industry representatives were asked to evaluate student performance in meeting the nine BCM Educational Outcomes on a basis of 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree, and 0-Not Applicable. The results of this evaluation are:

<table>
<thead>
<tr>
<th>Educational Outcomes</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work with people</td>
<td>2</td>
<td>9</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Think &amp; reason</td>
<td>3</td>
<td>8</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Solve construction problems</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sound economic decisions</td>
<td>1</td>
<td>7</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Communications</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Technology literacy</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ethical</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Successful industry entry</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ability to lead</td>
<td>3</td>
<td>8</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

In summary, Industry ranked student performance as strongest in technological literacy and ethics, followed by the abilities to think & reason, to lead in the industry and community, solve construction problems, communicate clearly, preparation for entry in to the industry, ability to work with all types of people, and ability to make sound economic decisions, in that order.

2. MODIFY EDUCATIONAL OBJECTIVES?

Comments received on this question included:

- Add more scheduling (1)
- Add plan reading (1)
- Add risk management class. (1)
- No change (5)
- No comment (6).

3. THE NUMBER OF SCHOOLS RECRUITED FROM?
Fall 2009 Industry Survey Summary

INTRODUCTION

The Department of Construction Management (CM) has implemented a formal program of self assessment and continuous improvement. As part of this process, surveys are conducted periodically with different stakeholder groups who are involved with the CM academic program.

The chair of the department receives the surveys. The results are compiled by the chair and shared with the faculty, staff, administration and various stakeholder groups such as the CM Advisory Council. This information is used in the annual summer self assessment of the program and curriculum conducted by the CM faculty and staff. Academic program changes are formally processed within the university each Fall.

There were 15 members from Industry who took part in the Fall 2009 survey at the CCEC Fall 09 Employer Showcase. The results of the survey follow.

1. VIEW OF CM EDUCATIONAL OUTCOMES

The industry representatives were asked to evaluate the BCM Educational Outcomes. On a basis of 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree, and 0-Not Applicable. The results of this evaluation are:

<table>
<thead>
<tr>
<th>Educational Outcomes</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work with people</td>
<td>6</td>
<td>7</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Think &amp; reason</td>
<td>8</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Solve construction problems</td>
<td>9</td>
<td>6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sound economic decisions</td>
<td>5</td>
<td>8</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Communications</td>
<td>4</td>
<td>7</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Technology literacy</td>
<td>7</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ethical</td>
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<td>Ability to lead</td>
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</table>

In summary, Industry felt the most important Educational Outcomes were the ability to solve construction problems and being ethical. Conversely, communications and successful industry entry upon graduation were less important.

2. MODIFY EDUCATIONAL OBJECTIVES?

Comments received on this question included:

- No opinion (11).
- Focus on “think and reason logically”.
- They are all pretty good. Maybe add more real world experience.
- Would add LEED accreditation and Bill of Materials.
- Ability to work within a team and independently.

3. THE NUMBER OF SCHOOLS RECRUITED FROM?
4. RANK OF UNF CM GRADUATES IN YOUR POOL

<table>
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<tr>
<th>Range</th>
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One no opinion

5. PERFORMANCE OF UNF CM GRADUATES COMPARED TO OTHERS

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<tr>
<th>Performance</th>
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Three no opinion

6. QUALITY OF THE TECHNICAL CONTENT CM CURRICULUM COMPARED TO OTHERS

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Three no opinion

7. COMPREHENSIVENESS OF THE TECHNICAL CONTENT COMPARED TO OTHERS

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</table>

Three no opinion

Generally, in reviewing the responses from questions 3-7, the industry representatives feel that the UNF CM program and students are on par or better than other programs.

8. MAJOR STRENGTHS?

Industry responses were:

- Solid school; strong for local positions.
- No comment (4).
- It is positive that they are more hands on.
- Willing to work hard.
- Many come from school with experience which is helpful.
- Offers real world experience for students.
- Good Internship program; better experience coming out of school.
- On site experience.
- Relatively the same as other students.
- The Internship and industry involvement are definitely positive.
- We like to see graduates that have construction experience.
- Superior community oriented service learning programs. More previous experience and knowledge than other schools.
9. MAJOR WEAKNESS?

Industry representative comments were:

- No comment (5).
- No (4).
- Not very informed on LEED.
- Changes in professors.
- Work experience not related to construction.
- UF students slightly more advanced technically.

10. CHANGES DESIRED

Comments from industry representatives were:

- Would add BIM and LEED.
- No comment (6).
- More community involvement.
- Seemed like the students has less professionalism.
- More field trips to job sites.
- Have OSHA 30 after Safety and LEED accreditation after Green Construction.
- More technical emphasis; LEED training; Project Management training.
- More plan reading (mechanical, electrical, plumbing) and public speaking.
- Graduate with OSHA 30 and ready to take LEED AP exam.
- Continue with curriculum similar to professional world, e.g. estimating, scheduling and construction systems.

11. CONSTRUCTION APPLICATION SOFTWARE USED IN INDUSTRY

- Scheduling: P3 (3), Suretrak (4)
- Project Management: Expedition (1), Prolog (5), P6 (1), SAP, Viewpoint
- Cost Estimating: Excel (1), HCSS (1), Timberline (2), JD Edwards (1), IBuild (1)
- Drawing: AutoCAD (3), BIM (3), OnScreen Takeoff (1), MC2 (1), Dirtworks
- Site Analysis: HCSS (1)
- Office: MS Office Suite (5), MS Sharepoint (1)
- Other: Adobe, DBO2 – safety observation reporting on PDA

A question was also raised on emerging technology of interest:

- Focus more on LEED
- Green applications with LEED and emerging technologies such as BIM.
- BIM – Networks; BIM integrated into curriculum.
- Starting to work job sites with handheld computers – Building Integrated Modeling (BIM).

12. OTHER NEW AREAS IMPORTANT TO YOU?

Industry views on the importance of the new content:
• BIM (2).
• No comment (6).
• LEED.
• Green building 0 understand LEED certification process.
• TSIM.
• Leadership.
• Learning to handle LEED submittals and get LEED certified.
• BIM software is popular; Internet based software is popular – Sharepoint.
• Construction management software – Prolog, PENIA, Constructmore.
• Sustainable building concepts; LEED certification.

12. ANY ADDITIONAL COMMENTS?

Additional comments offered:

• No comment (10).
• Continue Internships; present simulated projects in curriculum.
• BIM – 3D modeling for MEP coordination.
• Focus on green programs and Internet based construction.
• Definitely GPS and GIS.
• Students were well groomed, courteous, inquisitive, well mannered, above average presentation compared to other schools.
INTRODUCTION

The Department of Construction Management (CM) has implemented a formal program of self assessment and continuous improvement. As part of this process, surveys are conducted periodically with different stakeholder groups who are involved with the CM academic program.

The chair of the department receives the surveys. The results are compiled by the chair and shared with the faculty, staff, administration and various stakeholder groups such as the CM Advisory Council. This information is used in the annual summer self assessment of the program and curriculum conducted by the CM faculty and staff. Academic program changes are formally processed within the university each Fall.

There were 6 members from Industry who took part in the Spring 2009 survey at the CCEC Spring Employer Showcase. The results of the survey follow.

1. VIEW OF CM EDUCATIONAL OUTCOMES

The industry representatives were asked to evaluate the BCM Educational Outcomes. On a basis of 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree, and 0-Not Applicable. The results of this evaluation are:

<table>
<thead>
<tr>
<th>Educational Outcomes</th>
<th>5</th>
<th>4</th>
<th>3</th>
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<td>Think &amp; reason</td>
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<tr>
<td>Ability to lead</td>
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</table>

In summary, the Industry felt that the ability to think and reason, communicate and successful industry entry were the most important Educational Outcomes. Conversely, computer literacy and the ability to lead upon graduation were less important.

2. MODIFY EDUCATIONAL OBJECTIVES?

Comments received on this question included:

- No opinion (4).
- No (1).
- Reference low numbers (1).
3. **THE NUMBER OF SCHOOLS RECRUITED FROM?**

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One no opinion

4. **RANK OF UNF CM GRADUATES IN YOUR POOL**

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One no opinion

5. **PERFORMANCE OF UNF CM GRADUATES COMPARED TO OTHERS**

<table>
<thead>
<tr>
<th>Performance</th>
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<tbody>
<tr>
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<td>about the same</td>
<td>5</td>
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One no opinion

6. **QUALITY OF THE TECHNICAL CONTENT CM CURRICULUM COMPARED TO OTHERS**

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One no opinion

7. **COMPREHENSIVENESS OF THE TECHNICAL CONTENT COMPARED TO OTHERS**

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</table>

Two no opinion

Generally, in reviewing the responses from questions 3-7, it appears industry representatives feel the UNFCM students are on par with other students. Some industry members felt that the quality and comprehensiveness of the curriculum technical content could be improved.

8. **MAJOR STRENGTHS?**

Industry responses were:

- Part time experience.
- No comment (2).
- Relative work experience.
- No.
- Usually pull more people from here than any other career fair that we participate in.
9. MAJOR WEAKNESS?

Industry representative comments were:

- No comment (2).
- No.
- Professionalism.
- Some want to go straight into project management.
- Resumes weak; self-presentation; confidence.

10. CHANGES DESIRED

Comments from industry representatives were:

- 4 students getting classes they need to graduate timely; continuity in program leaders/teachers.
- No comment (5).

11. CONSTRUCTION APPLICATION SOFTWARE USED IN INDUSTRY

- Scheduling: P3 (1)
- Project Management: Expedition (1), Prolog (1), P6 (1)
- Cost Estimating: Excel (1)
- Drawing: AutoCAD (1)
- Site Analysis: no comments
- Office: MS Office suite
- Other: B/M, MS Outlook, On-screen Take-off

A question was also raised on emerging technology of interest:

- LEED

12. OTHER NEW AREAS IMPORTANT TO YOU?

Industry views on the importance of the new content:

- Performance of new “green” building products such as adhesives, sealants, etc.
- No comment (3).

12. ANY ADDITIONAL COMMENTS?

Additional comments offered:

- No comment (6).
INTRODUCTION

The Department of Construction Management (CM) has implemented a formal program of self-assessment and continuous improvement. As part of this process, surveys are conducted periodically with different stakeholder groups who are involved with the CM academic program.

The chair of the department receives the surveys. The results are compiled by the chair and shared with the faculty, staff, administration and various stakeholder groups such as the CM Advisory Council. This information is used in the annual summer self-assessment of the program and curriculum conducted by the CM faculty and staff. Academic programs changes are formally processed within the university each Fall.

Nine (9) members of the CM Advisory Council took part in the Fall 2009 survey. The results of the survey follow.

1. VIEW OF BCM EDUCATIONAL OUTCOMES

The industry representatives were asked to evaluate student performance of the BCM Educational Outcomes. On a basis of 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree, and 0-Not Applicable. The results of this evaluation are:

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</table>

In summary, the industry CMAC members strongly agreed that our students met the BCM Educational Outcomes, especially in the areas of communications, working with people, thinking/reasoning, and solving construction problems. The responses indicate improvement is needed in ethics, successful industry entry and leadership.

2. MODIFY EDUCATIONAL OBJECTIVES?

Comments received on this question included:

- No comment (5).
- Right on target.
- Project cost control.
- Add time management effectiveness.
- No change (1).
INTRODUCTION

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There were 4 members of the CM Advisory Council who took part in the Fall 2008 survey. The results of the survey follow.

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The industry representatives were asked to evaluate the BCM Educational Outcomes. On a basis of 5-Strongly Agree, 4-Agree, 3-Neutral, 2-Disagree and 1-Strongly Disagree, and 0-Not Applicable. The results of this evaluation are:

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</table>

In summary, the industry CMAC members felt that the ability to solve construction problems, make sound economic decisions and communication skills were the most important Educational Outcomes. Conversely, the ability to lead upon graduation was less important.

2. MODIFY EDUCATIONAL OBJECTIVES?

Comments received on this question included:

- No opinion (2).
- No - emphasis on communications.
- Potentially ad – “ability to market firm to potential clients and the community.”
3. THE NUMBER OF SCHOOLS RECRUITED FROM?

<table>
<thead>
<tr>
<th>~5</th>
<th>6-10</th>
<th>11-15</th>
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4. RANK OF UNF CM GRADUATES IN YOUR POOL

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one “no opinion” – only one graduate

5. PERFORMANCE OF UNF CM GRADUATES COMPARED TO OTHERS

<table>
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<tr>
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<th>about the same</th>
<th>not as well</th>
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two “no opinion”

6. QUALITY OF UNF CM CURRICULUM COMPARED TO OTHERS

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one “no opinion” and “have not reviewed the curriculum”

7. COMPREHENSIVENESS OF CM CONTENT COMPARED TO OTHERS

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</table>

one “no opinion”

Generally, in reviewing the responses from questions 3-7, it appears industry representatives feel the UNFCM students and program are on par or a bit better than other construction academic programs. However, there is always room for improvement.

8. MAJOR STRENGTHS?

Industry responses were:

- Well rounded in construction.
- No comment (2).
- Practical knowledge – hands on.

9. MAJOR WEAKNESS?

Industry representative comments were:

- No comment (2).
• Writing skills.
• Ability to write and cost control.

10. CHANGES DESIRED

Comments from industry representatives were:

• Add cost control course to base requirements.
• Insure “real world” situations are included. Add surveying skills.
• No comment (2).

11. CONSTRUCTION APPLICATION SOFTWARE USED IN INDUSTRY

• Scheduling: P3 (1), Sure Track (1)
• Project Management: Prolog (1), Project Talk (1)
• Cost Estimating: MC3 (1)
• Drawing: Revit (1)
• Site Analysis: no comments
• Office: no comments
• Other: Master Builder (1)

A question was also raised on emerging technology of interest:

• BIM.
• General knowledge is essential.
• No comment (1).
• BIM, site management tools such as interactive tablets for reporting/project team collaboration.

12. OTHER NEW AREAS IMPORTANT TO YOU?

Industry views on the importance of the new content:

• Performance of new “green” building products such as adhesives, sealants, etc.
• No comment (3).

13. ON-LINE CM MASTERS DEGREE PROGRAM?

• Strongly disagree.
• Agree but not on-line.
• Neutral but face-to-face is critical.
• Should be in person or hybrid with emphasis on in person.

13. ANY ADDITIONAL COMMENTS?

Additional comments offered:

• You have a great program that only needs minor modifications as technology changes.
• No comment (2).
• Would like to see ABC Student Chapter more active and separate from CMA.
ISQ - Course Evaluations by Students

Instructional Satisfaction Questionnaire (ISQ)
A formal student assessment of the instructor and the course is conducted each semester for each course. Two categories, the course and the instructor, are evaluated by the students with approximately 15-20 survey questions per category. The key question, “Overall, how would you rate the instructor”, is viewed as a fundamental question on how successful the course was. The rating scale is from 0 to 5 with 5 being the best. An ISQ score of 4 or better on the overall instructor performance is viewed to be a quite good course. In addition, the students have an opportunity to add written comments. All ISQ student course evaluations are provided to the chair. The ISQ course results are then reviewed by the individual faculty member and the department chair as part of the faculty annual evaluation.

An example of an ISQ student evaluation is shown below.

BCN 3XXX (3)

Summer 2009 Student Evaluations 35/42 responses

Instructor

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Class/Course

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Alumni Survey

At present the CM Department does not have an alumni database. However, in recent times, the department is trying a new approach to reach alumni, Alumni Net. This is a forum where CM graduates can network among themselves. It also is a means to develop a database of contact information for future alumni surveys. Also, there is a fair amount of informal feedback to the CM from students working in the industry. Feedback includes new topics that should be included in the curriculum, new texts that might be of interests, job openings and other opportunities.

The following shows the interface to CM Alumni Net and a sample of actual data being compiled. (http://projects.ccec.unf.edu/cm/alumni/index.php)

AlumniNet

BCM graduates have suggested this "Alumni Network" page to help them stay in contact with each other. If you would like to add/remove or update your contact information, click here to let us know.

<table>
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<tr>
<th>Name</th>
<th>Contact Information</th>
<th>Work Location</th>
<th>Work Information</th>
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<tr>
<td>Longo, Anthony</td>
<td><a href="mailto:aj1520@aol.com">aj1520@aol.com</a></td>
<td>Skanska USA Building Inc.</td>
<td>Phone: 859 2156</td>
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<tr>
<td>Loper, Keith</td>
<td><a href="mailto:n00601339@unf.edu">n00601339@unf.edu</a></td>
<td>Clay Electric Co-op</td>
<td>Phone: Not Provided</td>
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<td>Mcgraw, Batey</td>
<td><a href="mailto:batey@mccumbergolf.com">batey@mccumbergolf.com</a></td>
<td>Walchle Lear Multifamily Advisors</td>
<td>Phone: 904-241-7600</td>
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www.facebook.com
Graduating Senior Survey 2009/2010 Academic Year Results - Facilities

- CM Computing facilities were sufficient:
  - Strongly Agree: 15
  - Agree: 14
  - Neutral: 14
  - Disagree: 3
  - Strongly Disagree: 1
  - Not Applicable:

- Equipment for CM classrooms was sufficient:
  - Strongly Agree: 41
  - Agree: 22
  - Neutral: 22
  - Disagree: 20
  - Strongly Disagree: 3
  - Not Applicable: 0

- The classrooms were sufficient:
  - Strongly Agree: 42
  - Agree:
  - Neutral: 24
  - Disagree: 11
  - Strongly Disagree: 0
  - Not Applicable: 0

- The library was sufficient:
  - Strongly Agree:
  - Agree:
  - Neutral:
  - Disagree:
  - Strongly Disagree: 5
  - Not Applicable: 0
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Legend:
- Excellent
- Good
- Average
- Poor
- Did Not Participate
- Not Applicable
2009-2010 Academic Year Industry Survey Results
Academic Year Results-Academic Advising

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

- Helpful Advice in developing my Program of Study
  - 36
  - 17
  - 17
  - 0
  - 0
  - 0

- Helpful Advice in selecting courses for each term
  - 40
  - 19
  - 19
  - 1
  - 2
  - 2

- Advice in career preparation was helpful
  - 30
  - 29
  - 29
  - 5
  - 2
  - 2

- Sought advice from my advisor often
  - 28
  - 28
  - 13
  - 5
  - 2
  - 1

- Sought advice from my faculty often
  - 32
  - 32
  - 17
  - 15
  - 15
  - 1

- Often spoke with faculty concerning the profession
  - 27
  - 27
  - 27
  - 13
  - 13
  - 14