

P12-188



THE FACULTY SENATE

December 19, 2011

MEMORANDUM

TO: Dr. R. Bowen Loftin, President

FROM: Michael Benedik, Speaker *MJB*

SUBJECT: Approval of Graduate Council Item **(FS.29.80)**

At its regular meeting on December 12, 2011, the Faculty Senate approved the following curriculum item from the Graduate Council. The Faculty Senate submits it for your approval. Attached is a copy of the material sent to our Senators.

GRADUATE COUNCIL
Special Consideration
College of Architecture

Proposal to offer a Graduate Certificate in Transportation Planning via distance

Thank you for your time and consideration. Please inform me of your action on this matter.

Attachment

cc: Karan Watson
 Pamela Matthews
 Antonio Cepeda-Benito
 Sandra Williams
 Jorge Vanegas

Approved: Reviewed:

R. Bowen Loftin, President

3/29/12

Date

Graduate Council Report

November 3, 2011

Special Consideration Item:

Graduate Council approved the College of Architecture proposal to offer a Graduate Certificate in Transportation Planning via distance.

Texas A&M University
New Certificate, Bachelors, Masters, or Doctoral Program
♦ Proposal Checklist ♦

Requested by the Department or Unit of : Landscape Architecture and Urban Planning

Program Type, Level, Designation, Title, Description, Hours

Program Type Certificate Program Degree Program
 Program Level Undergrad Certificate Grad Certificate Bachelor Master Doctoral
 Degree Designation (i.e., BS, BA, MA, MS, MAgr, Med, PhD, EdD, etc.) Any student with an interest in transportation
 Title of proposed program: Certificate in Transportation Planning
 Proposed CIP Code (if known): _____

Brief program description (provide a catalog description for undergraduate and graduate certificates):

21st century transportation problems have become increasingly complex and interdisciplinary in nature, requiring skills, knowledge, and expertise that transcend traditional professional boundaries. The Graduate Certificate in Transportation Planning (CTP), offered through a collaborative partnership between the Colleges of Architecture and Engineering and the Texas Transportation Institute seeks to provide students with the education and training needed to address these professional challenges. The CTP is a 15-credit hour program that provides students with the substantive base of knowledge needed to be broadly successful in the transportation profession, as well as specialized instruction in three critical areas of professional need: Multimodal Systems Planning, Transportation and Urban Design, and Transportation Policy.

Minimum program semester credit hours (SCH) Certificates - 12 hours* Bachelors - 120 hours Masters - 30 hours
 Proposed program hours: 15 _____ _____
 *12 hours minimum to appear on transcript

Off-Campus or Distance Delivery

% of Program a student can take off-campus or through Distance Education	<u>Program Start Date</u>	<u>SACS Approval**</u>	<u>When Provost needs to inform SACS</u>
<input type="checkbox"/> 25%	_____	Notification Only	-----
<input type="checkbox"/> 50%	_____	Approval Required	6 months before first day of program
<input checked="" type="checkbox"/> 80%	<u>August 2012</u>	Approval Required	6 months before first day of program
<input type="checkbox"/> 100%	_____	Approval Required	6 months before first day of program

**Notification letter arranged through the Assistant Provost and sent by TAMU President.

Program Delivery Mode

	Location	
<input type="checkbox"/> On-campus	_____	
<input checked="" type="checkbox"/> Broadcast / TTVN	_____	
<input type="checkbox"/> Specific off-campus location***	_____	
<input checked="" type="checkbox"/> Distance Education / Internet	In-State <input checked="" type="checkbox"/> Out-of-State <input checked="" type="checkbox"/>	Start Date _____
<input type="checkbox"/> Out-of-Country	Will this program be offered with another institution? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
	If yes, contact Assistant Provost for additional reporting requirements.	

***Is this an approved SACS location? Yes No If no, a program prospectus must be sent to SACS.

Approved locations as of September 2009: TAMU-Galveston, TAMU-Qatar, University Center-The Woodlands, Dubai (EMBA)

Texas A&M University
New Certificate, Bachelors, Masters, or Doctoral Program
♦ Proposal Checklist ♦

Program Funding

Has program funding been finalized at the department or college level?

Yes

No

If no, explain or attach budget: _____

Will new costs for the first five years of the program be under \$2 million?

Yes

No

If new costs exceed \$2 million, coordinating board approval is required.

Submitted by (Contact Person):

Forster Ndubisi	<u>fnubisi@arch.tamu.edu</u>
Name	Email
Department Head	979-845-1019
Title	Phone

Certification Statement

By signing below, the Dean of the College certifies the proposed program complies with coordinating board standards. If the program is delivered through Distance Education, the Dean of the College certifies that they are following the *Principles of Good Practice for Academic Degree and Certificate Programs and Credit Courses Offered Electronically*.

Use additional signature lines if program is between three or more departments or colleges.

Forster Ndubisi

Signature, Department Head or Interdisciplinary Program Chair	Date	Signature, Department Head or Interdisciplinary Program Chair (if joint program)	Date
<hr/>		<hr/>	
<i>Typed or Printed Name</i>		<i>Typed or Printed Name</i>	
<hr/>		<hr/>	
Chair, College Review Committee	Date	Chair, College Review Committee	Date
<hr/>		<hr/>	
Dean of College	Date	Dean of College	Date
<hr/>		<hr/>	
Chair, University Curriculum Committee or Graduate Council	Date	Chair, University Curriculum Committee or Graduate Council	Date

Additional Approvals Required: Faculty Senate and President.

New Program Request Form for Certificate Programs, Bachelor's and Master's Degrees

Directions: An institution shall use this form to propose a new bachelor's or master's degree program. In completing the form, the institution should refer to the document *Standards for Bachelor's and Master's Programs*, which prescribes specific requirements for new degree programs. Note: This form requires signatures of (1) the Chief Executive Officer, certifying adequacy of funding for the new program; (2) a member of the Board of Regents (or designee), certifying Board approval, and (3) if applicable, a member of the Board of Regents or (designee), certifying that criteria have been met for staff-level approval. NOTE: Preliminary authority is required for all engineering programs. An institution that does not have preliminary authority for a proposed engineering program shall submit a separate request for preliminary authority prior to submitting the degree program request form. That request shall address criteria set in Coordinating Board rules Section 5.24 (a).

Administrative Information

1. Institution: Texas A&M University

2. Program Name – Show how the program would appear on the Coordinating Board's program inventory (e.g., *Bachelor of Business Administration degree with a major in Accounting*):
Graduate Certificate in Transportation Planning

3. Proposed CIP Code: 04.30101.00

4. Brief Program Description – Describe the program and the educational objectives:

21st century transportation problems have become increasingly complex and interdisciplinary in nature, requiring skills, knowledge, and expertise that transcend traditional professional boundaries. The Graduate Certificate in Transportation Planning (CTP), offered through a collaborative partnership between the Colleges of Architecture and Engineering and the Texas Transportation Institute seeks to provide students with the education and training needed to address these professional challenges. The CTP is a 15-credit hour program that provides students with the substantive base of knowledge needed to be broadly successful in the transportation profession, as well as specialized instruction in three critical areas of professional need: Multimodal Systems Planning, Transportation and Urban Design, and Transportation Policy.

The Certificate Program in Transportation welcomes students with diverse educational backgrounds, and is open to any graduate student at Texas A&M with an interest in transportation.

5. Administrative Unit – Identify where the program would fit within the organizational structure of the university (e.g., *The Department of Electrical Engineering within the College of Engineering*):
Department of Landscape Architecture and Urban Planning within the College of Architecture

6. Proposed Implementation Date – Report the first semester and year that students would enter the program: August 2012

7. Contact Person – Provide contact information for the person who can answer specific questions about the program:

Name: Forster Ndubisi

Title: Department Head

E-mail: fnubisi@arch.tamu.edu

Phone: 979-845-1019

**Department of Landscape Architecture and Urban Planning
College Of Architecture
Texas A & M University, College Station**

REQUEST TO OFFER EXISTING DEGREE PROGRAM VIA DISTANCE

The Department of Landscape Architecture and Urban Planning (LAUP) in the College Of Architecture at Texas A & M (TAMU), College Station is seeking permission to offer the existing Graduate Certificate in Transportation Planning via distance education (online to individuals) beginning August 1012.

Graduate Certificate in Transportation Planning

The field of transportation has become increasingly complex and multi-faceted. While the need for an interdisciplinary approach to transportation is widely recognized by the professional community, there are few, if any, educational programs that address the field of transportation in a truly comprehensive, interdisciplinary manner. Yet increasingly, the transportation profession needs practitioners that can complement their traditional areas of expertise with a broader, interdisciplinary perspective of how economics, public policy, finance, and urban design influence the effectiveness of the transportation system. To address this need, a TAMU university-wide graduate certificate in transportation planning was established in August 2008. This program has proved to be very successful. To date, five core certificate courses have either been restructured (3) or created (2) and delivered successfully. A total of 115 students have taken these certificate courses and 30 students have received certificates to date.

A major limitation of the existing certificate program is that it is available only to graduate students at TAMU in College Station. Put differently, the certificate is not accessible to place-bound students, thereby limiting access. Through the many advances in technology, new degree program formats are providing the flexibility to meet the needs of today's university students who must balance family, work, and school. To address this limitation and ensure continued education of transportation professionals, LAUP is requesting permission to extend the delivery of the existing certificate via distance to a wider audience/professionals interested in transportation in selected metropolitan areas in Texas, and beyond.

Preliminary indications suggest that an audience for the certificate exists in major metropolitan areas in Texas, especially Austin, Dallas, Houston, and San Antonio. Transportation professionals, therefore, will be positioned to receive a coherent interdisciplinary program in transportation at on-site and off-site-locations.

The Certificate will increase access, expand Texas A&M's transportation curriculum, and enhance the University's position as a national leader in transportation education. Additionally, the Certificate serves as a stepping stone towards the pursuit of a Master in Urban Planning (MUP) degree since certificate courses are an integral part of the MUP curriculum. Finally, this request advances the imperatives of TAMU's **Education First Initiative**.

In support of this request, LAUP offers the following information:

A. Describe the delivery system (s) to be used:

The Certificate in Transportation Planning program will utilize a fully interactive online format including asynchronous and synchronous delivery. Asynchronous activities will include but not be limited to, threaded discussions; video and audio presentations, written lectures linked to video and audio presentations, blogs and journals, document sharing, and shared online assessment. Synchronous activities will include live chat and web conferencing including video and audio interactions, small group forums, student presentations, and live assessment methodologies. The university-wide learning management platform, Blackboard Vista (formerly Web CT Vista), will be the primary virtual platform for delivering the proposed online Certificate. Delivery tools include QuickTime, Adobe Presenter, Podcasts, Audacity, Calibrated Peer Review, Camtasia, Snagit, and Centra Web Conferencing System.

The platform and tools are currently managed by the Texas A & M Instructional Technology Services (ITS), which represents the hub for technology-related services pertaining to online programs. ITS also provides professional development opportunities, administers eLearning resources, and empowers instructors to use best practices in higher education to enhance student learning through the use of technology. During the 2010/11 academic year and in preparation for the development and delivery of online courses, LAUP worked with ITS to design and deliver six specialized tailored workshops (2-3 hrs. each) for twelve departmental (12) faculty members including those that teach courses in transportation planning as well as three (3) graduate students. These workshops focused on designing and implementing effective online courses as well as the tools most appropriate for doing so.

Topics covered include developing effective syllabus, managing grade books, discussion forums, chat rooms as well as other content-management tools. Also covered are tools such as Audacity, Camtasia, and Centra Web conferencing system. Program faculty members that teach courses in transportation planning are expected to continue to participate systematically and regularly in institutional professional development opportunities to maintain currency of technological expertise.

B. Indicate expected enrollment for five years

Expected enrollment for the next five years is anticipated to be 10-15 graduate students per year. We expect that professionals taking transportation courses will be approximately 20-25 per year.

C. Confirm compliance with Sections of Subchapter E (Attach separately a certificate of compliance statement)

The College Of Architecture certifies that the Graduate Certificate in Transportation Planning to be delivered by distance meets the standards and criteria established in Chapter 4, Subchapter E of the Rules and Regulations of the Texas Higher Education Coordinating Board . See attached letter Certificate of Compliance Statement, Attachment A.

D. Attach in a tabular format, a list of the courses to be taught, including course number and title; the number of semester credit hours for each; and the mode of instruction for each. Indicate which courses have already been developed as distance courses and the timeline for others to be developed as distance courses.

See table, Attachment B.

E. Attach a chart showing semester credit hour requirements for the program, including total SCH.

See chart, Attachment C.

F. Attach a roster of instructional staff, following the format required by the Southern Association of Colleges and Schools.

See roster and accompanying information, Attachment D.

Also describe faculty training to develop and deliver distance courses.

Texas A & M Instructional Technology Services (ITS), a unit under the Vice President for Technology, is the hub for technology-related services pertaining to online programs in the university including the proposed distance program in transportation planning. ITS also provides professional development opportunities and administers eLearning resources. Faculty teaching online have participated in workshops on eLearning and use of Blackboard Vista, which is the university-wide platform for uploading syllabi, managing grades, and teaching courses in either a hybrid format or completely online. Its features include managing grade books, assignments, chat rooms, and assessments as well as course content management, audio/video presentations, bulletin board management, and quizzes/examinations administration. The ITS will provide continuing training for Certificate program faculty members to increase their expertise. In addition, more experienced faculty members involved in technology-mediated instruction are actively involved as peer mentors for less experienced faculty members.

Address impact of the program on teaching loads

The normal teaching load for a full-time faculty member in LAUP, College of Architecture at TAMU is nine semester credit hours (i.e., three courses) per semester. Tenure track faculty members with clear expectations for research and active participation in graduate committees and service typically teach 2 courses per semester. Three of the proposed certificate courses are currently taught by non-tenure track faculty member jointly appointed with Texas Transportation Institute. Since only 5 courses will be taught online, we do not expect the teaching loads to be adversely affected by the proposed online Certificate in Transportation Planning.

G. Describe the evaluation plan to be used, addressing SACS criteria.

Transportation planning is a concentration area in the urban planning as well as in allied disciplines such as civil and transportation engineering. Faculty members who teach the core transportation planning course are members of the department. These faculty members, like others, participate annually in faculty evaluations. Each member of the department completes an annual evaluation based on the mutually agreed upon goals for teaching, research, service and engagement between the faculty and Department Head. In addition, tenure-track faculty members are reviewed in two phases, first by the department's Promotion and Tenure Committee and then the Department Head.

The Head reviews the evaluation and discusses them with each faculty member. A signed copy is then forwarded to the Dean of the College of Architecture for onward transmittal to the Dean of Faculty and Provost in accordance with approved University policies and procedures.

Student evaluation, pedagogical innovations, participation in workshops including technology-mediated instruction, innovative assessments linked to learning outcomes and participation in the scholarship of teaching, are some of the criteria used to evaluate faculty for teaching.

More specifically, student evaluations and assessments linked to learning outcomes will be conducted for each proposed online course and these will be compared to similar courses offered on site.

Additionally, other factors are assessed when considering a program that is provided to students via distance education. The approval processes at the university level (Graduate Committee, Faculty Senate, as well as other pertinent committees) jointly review the program's proposal to ensure the following factors have been addressed:

- Faculty readiness (faculty knowledge and skills; sufficient number of qualified faculty, including the market availability of future qualified faculty members in the discipline; sufficient university resources, including projected travel expenses if it is an off-campus program, computer resources and software, etc.);
- Student support services (the availability of library resources and plans for accomplishing other learning experiences unique to the discipline, i.e., residency if it is a doctoral program, laboratory experiences, etc.); and
- Alignment with the strategic plans of College Of Architecture and Texas A&M University.

Student learning outcomes for all academic programs in LAUP including those for the Master of Urban Planning (MUP) program have been entered in the WEAVE, the university's data planning and assessment system. LAUP in conjunction with the College is responsible for ensuring comparable achievement of learner outcomes, student persistence and completion rates, graduate placement, and follow-ups. These criteria will be assessed annually and addressed in the department's plans and assessment reports. In instances where any part of an academic program is offered off-campus, or other distance education modalities (web-based instruction, interactive television, etc.), as will be the case with the proposed Certificate in Transportation Planning by distance, the Department Head, Certificate Coordinator and/or faculty will develop assessment techniques that evaluate the comparability of student achievement and learning outcomes with on-campus course delivery annually, and respond to any discrepancies in a timely manner, if they arise. Regardless of modality or location of instruction, the University is committed to comparing on-campus and off-campus student achievement for all programs.

Results of these various evaluation methods which assess learning outcomes will be reviewed by the Certificate/program faculty and the department's Curriculum Committee/Coordinator Council. Weaknesses identified during the Certificate assessment and review processes are triggers for program and/or course change. The College of Architecture and TAMU are committed to program assessment and continuous improvement for all degree and certificate programs.

H. Attach Cost Estimate Form that indicates additional costs associated with this request and sources of funds to meet the costs.

The Certificate of Transportation Planning has been offered at TAMU since 2008. The Department Head (Dr. Ndubisi) along with 2 faculty members that teach courses in transportation planning received two grants totaling \$120,000 in 2009 and 2010 from the Federal Department of Transportation via the Texas Transportation Institute (TTI) University Transportation Center for Mobility, to assess the capability of delivering the Certificate by distance and to convert four Certificate courses for online delivery by April, 2012. These are the key budgetary expenditure for implementing this distance program. As such, the department's current budget will cover program expenses including administration, faculty, clerical/staff, supplies, materials and other costs associated with delivering the Certificate by distance.

I. Describe the arrangement made to share educational resources through consortia with other institutions, if any.

N/A

J. Additional Information that would be useful in evaluating this request.

Attachment A
Certification Statement

Attachment B

**Graduate Certificate in Transportation Planning:
Certificate Structure and Credit Hour Requirement**

Prefix and Number	Required Courses	SCH	Campus FTF	Online*
PLAN 612	Transportation in City Planning	3	X	X
PLAN 673	Design for Sustainable Transportation	3	X	X
PLAN 674	Transportation Systems Analysis	3	X	X
PLAN 676	Transportation Investment Decisions	3	X	X
PLAN 691	Comprehensive Examination	3	X	X
	Total Required SCH	15		
Prefix and Number	Elective/Substitute Courses	SCH	Campus FTF	Online*
PLAN 670	Urban Public Transportation Planning	3	X	N/A
PLAN 678	Transportation Studio	3	X	N/A
	Total Required SCH	6		

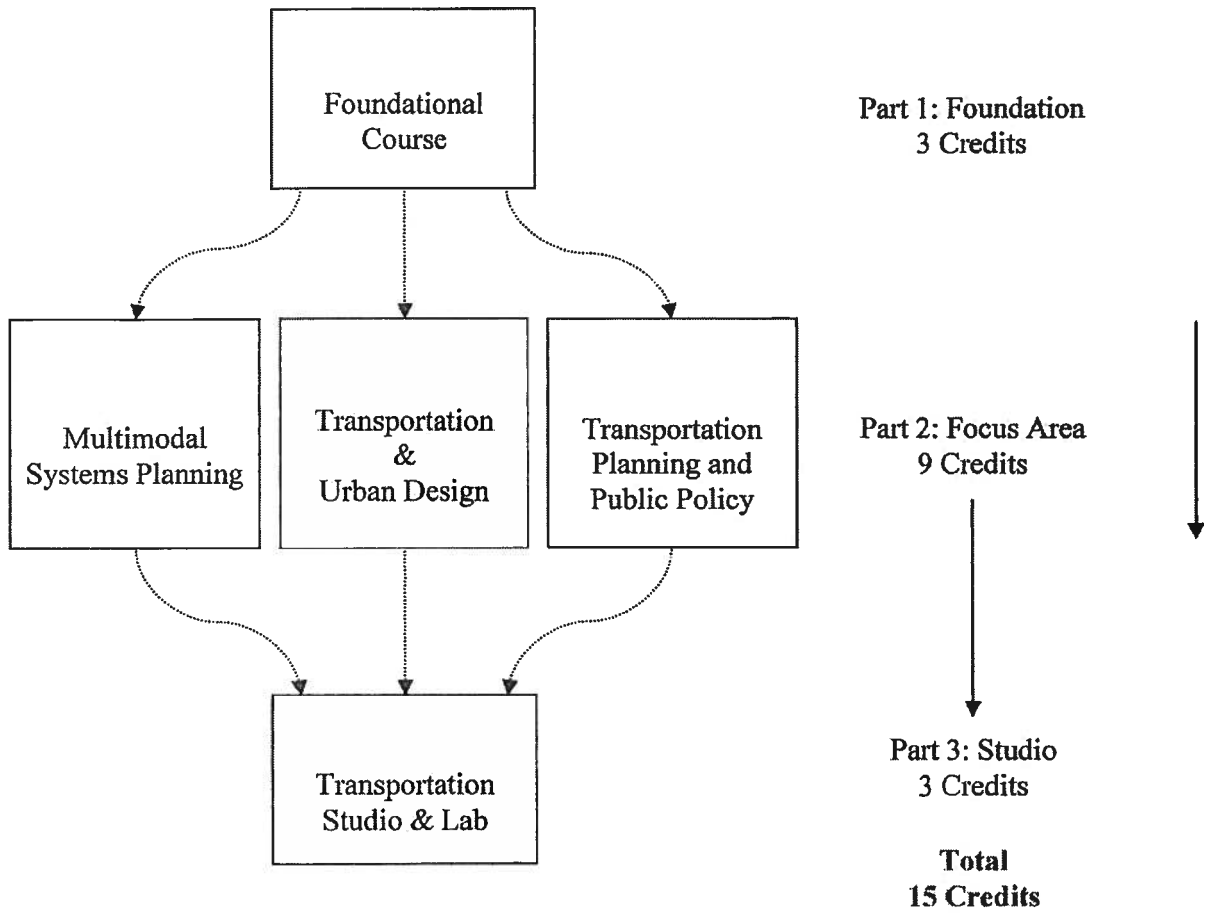
*Under Development: Due April 30, 2012 [course development supported through a grant from the Federal Department of Transportation via TTI's University Transportation Center for Mobility due April, 2012]

Attachment C

Certificate Structure and Credit Hour Requirement

The Transportation Certificate will involve a 15-credit sequence comprised of one required foundational course (3 credits), three focus area courses (9 credits), and a capstone course (3 credits) providing a comprehensive overview and application of the skills and techniques learned during the completion of the certificate program. A comprehensive examination may be substituted in lieu of the capstone course. The proposed program differs in three minor ways from the existing Certificate Program: First, the prospective student does not necessarily need to be enrolled in a graduate degree at the university to be enrolled in the Certificate since it is targeted to place-bound students. Second, the certificate does not need to be awarded concurrent with a graduate degree. Third, the courses will be delivered as appropriate in a condensed and flexible format to increase access as also done in the Bush School.

Figure 1 (next page), depicts the overall structure of the 15-credit certificate program, comprised of the following components:



Certificate in Transportation - Curriculum Structure

Attachment D

Instructional Faculty

Table D1 depicts faculty members who teach core courses in the Graduate Certificate of Transportation Planning Program.

Name of Core Faculty and Faculty Rank	Highest Degree and Awarding Institution	Courses Assigned in Program	% Time Assigned to the Program *
Joh, Ken; Assistant Professor	Ph.D. in Planning, Policy, and Design from the University of California, Irvine	PLAN 604: Planning Methods I, PLAN 670: Public Transportation, PLAN 673: Design Sustainable Transportation	75%
Eisele, Bill; Visiting Associate Professor	Ph.D. in Civil Engineering from Texas A&M University	PLAN 678: Applied Transportation Studio	25%
Perkinson, Dennis; Lecturer	Ph.D. in Urban and Regional Science from Texas A&M University	PLAN 612: Transportation in City Planning	10%
Lomax, Tim; Lecturer	Ph.D. in Civil Engineering from Texas A&M University	PLAN 612: Transportation in City Planning	10%
Turnbull, Katherine Lecturer	Ph.D. in Urban and Regional Science from Texas A&M University	PLAN 612: Transportation in City Planning	10%
Ellis, David; Visiting Associate Professor	Ph.D. in Urban and Regional Science from Texas A&M University	PLAN 676: Transportation Investment Decisions	25%

Note: Twenty-Five (25%) assignment is the equivalent of teaching one course

Table D2 depicts faculty members who teach supportive electives in the Certificate of Transportation Planning Program as well as transportation concentration courses in the MUP and Ph.D. programs.

Name of Core Faculty and Faculty Rank	Highest Degree and Awarding Institution	Courses Assigned in Program	% Time Assigned to the Urban Planning Program
Van Zandt, Shannon; Assistant Professor	Ph.D. in Urban and Regional Planning from the University of North Carolina at Chapel Hill	PLAN 601: Introduction to Planning, PLAN 613: Planning Methods and Techniques, PLAN 656: Housing and Community, PLAN 661: Communications, PLAN 684: Professional Internship	100%
Wunneburger, Doug; Senior Lecturer	Ph.D. in Forestry from Texas A&M University	PLAN 625: GIS in Landscape and Urban Planning, PLAN 626: Advanced GIS in Landscape Architecture and Urban Planning,	100%

		URSC 325: Introduction to GIS, URSC 326: Advanced GIS Urban and Regional Study	
Lindell, Michael; Professor	Ph.D. in Psychology from the University of Colorado, Boulder	PLAN 649: Organized Disaster Response, PLAN 650: Disaster Response Planning, URSC 310: Urban Analytic Methods	100%
Peacock, Walt; Professor and HRRC Director	Ph.D. in Sociology from the University of Georgia	URSC 641: Analytic Methods, URSC 642: Analytic Methods	100%
Brody, Sam; Professor	Ph.D. in City and Regional Planning from the University of North Carolina at Chapel Hill	PLAN 641: Environmental Planning Administration	25%
Ndubisi, Forster; Professor and LAUP Department Head	Ph.D. in Regional Planning and Resource Development from the University of Waterloo, Canada	LAND 200: Introduction to Landscape Architecture Practice, LAND 689: Ecological Planning, URSC 301: Introduction to Planning, URSC 485: Directed Studies	25%

