Self-Study Report

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1. External Review Team Charge

The Master of Geoscience (MGsc) is a college-wide, non-thesis, 36 credit hour degree requiring coursework contributions from at least two departments within the College of Geosciences. The degree allows each department to offer the Master of Geoscience through a variety of flexible coursework (degree plans) depending on the disciplinary focus and the primary department of residence for a student.

Since around 2008, nearly all students receiving this degree had initially sought MS degrees (with thesis) in College departments (Atmospheric Sciences, Geography, Oceanography, and Geology and Geophysics). However, some students suffered personal, financial, or research setbacks while conducting research for their thesis. As a result, they were unable to complete a Master’s thesis. These students sought the MGsc as a non-thesis option that allowed them to receive a Master’s degree that would recognize their graduate-level coursework. Their “home” departments, with the exception of Geography, do not offer non-thesis MS degrees. This made the MGsc the preferred degree program for students who had completed coursework for a Master’s degree but were unable to complete the research necessary for the thesis.

Starting in 2016, the College of Geosciences began developing a structured option of the MGsc to be offered through distance education. In November 2016 we notified the Texas Higher Education Coordinating Board of our intention to deliver the MGsc by distance education.

Two motivations explain our aim to deliver the MGsc by distance education with structured coursework. First, the Department of Geography offers a series of courses that focus on Geographic Information Science and Technology (GIS&T), which emphasizes the tools and techniques of spatial analysis. GIS&T also encompasses the triad of modern geospatial technologies – Geographic Information Systems (GIS), Global Navigation Satellite Systems (GNSS) and Remote Sensing – that are enabling the current revolution in spatial analysis. Faculty research and teaching in this subfield is vibrant and active in the Texas A&M Geography Department.
Second, geospatial technologies, particularly GIS&T, are in demand for many professional career paths, notably in the petroleum industry. Dialogue among Geography faculty members and Houston-based oil and gas professionals revealed the need for Master's-level training in GIST. These professionals do not find it practical to attend on campus. Online delivery of this program would offer an opportunity for upward advancement or re-training.
2. Executive Summary

We are transitioning an on-campus Master of Geoscience (MGsc) program, which has attracted few students and often served as an alternative to a thesis-based Master’s degree, into a high-quality distance delivery program, initially focused on meeting Geographic Information Science and Technology (GIS&T) needs of the oil and gas industry. Our considerable investments of financial and human capital have yielded a defined degree program that will enroll approximately 200 students within 3 years. Our primary learners will be professionals in the petroleum industry seeking to upgrade their skills and professionals seeking to retrain to enter or re-enter this field. These professionals are not currently on the College Station campus, thereby creating an opportunity for the College of Geosciences to broaden and deepen its educational impact by directly addressing a critical demand within the state’s workforce. Students will have the flexibility to adapt the pacing of the instruction to their own needs; successful degree completion may be accomplished between 18 months to 3 years.

We will scale this model for student needs and faculty teaching loads, permitting academically qualified professionals to assist program faculty in providing rich educational experiences to students. By incorporating such an operational instructional resource model, we will enhance the program’s ability to manage and scale instructional resources while consistently upholding high academic standards and accreditation or compliance requirements of Texas Higher Education Coordinating Board (THECB) and Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).

We will admit our first distance education students in June 2017 and offer our first online courses in Fall 2017. Our success with the GIS&T-focused MGsc, sustained primarily by faculty in Geography, will be applied to other defined degree plans within the MGsc that tap the expertise of faculty in Geology and Geophysics.
3. Introduction to the MGsc

3.1 Program histories

3.1.1 The on-campus Master of Geoscience offers opportunities to study a broad range of environmental, energy and geoscience topics. With no thesis required, this program encouraged students to take a wide range of courses across the College of Geosciences. The program was not intended as a teacher-certification curriculum; however, it offered opportunities for secondary education teachers to increase their earth science knowledge base.

A Master of Geosciences in Geography, Geology, Geophysics, Meteorology, and Oceanography was under consideration in August 1997 by all department heads in the College and by the Dean’s leadership team. At that time, leaders of this initiative sought comment from Academic Support Services and the Assistant Provost, suggesting that they had a strong conceptual diagram of the MGsc and were seeking guidance on approval pathways and bottlenecks. In April 1998, a full draft proposal for a 36-hour non-thesis MGsc, incorporating changes made during a meeting of “interested faculty,” was submitted to faculty for consideration and additional comment by Dr. Melvin Schroeder, professor of Geology. The documents indicate that the MGsc, with Classification of Instructional Programs (CIP) 40.0101, was to be administered by “four departments of the College of Geosciences and a Degree Program Committee.” This committee would be comprised of the graduate director of each department. Anticipated launch was Fall semester 1999. Contacts were listed as Dr. Schroeder and Dr. Andrew Hajash.

3.1.2 We embarked on efforts to deliver the MGsc, with an emphasis on petroleum-related GIS&T, through distance education around 2013. We envisioned that this program would be delivered polysynchronously (blending of synchronous and asynchronous formats), allowing the College to establish a global audience and reach a wide variety of industry professionals from within Texas, out-of-state, and internationally while providing an integration of learner-learner, learner-content, and learner-instructor interaction through a blending of multiple channels of online communication.
The origin of discussions for the distance education MGsc dates to around 2013, when consolidation of faculty hires and awareness of distance education as a means to increase the number of graduate students in the College coincided. By 2013, the Department of Geography offered a series of courses offered by talented faculty (see Faculty profile below and Appendix A for full CVs) that focused on Geographic Information Science and Technology (GIS&T). This curriculum reflected several decades of development of the GIS&T subfield, which emphasizes the tools and techniques of spatial analysis. It also encompasses the triad of modern geospatial technologies – Geographic Information Systems (GIS), Global Navigation Satellite Systems (GNSS) and Remote Sensing – that are enabling the current revolution in spatial analysis. Faculty research and teaching in this subfield had been vibrant and active in the Texas A&M Geography Department for many years before 2013, but faculty departures had impeded our efforts to create a reliable curriculum.

We also recognized that geospatial technologies, particularly GIS&T, were in demand for many professional career paths. Faculty in the Department of Geography had made notable progress working with industry professionals to identify the technical skills and workplace competences required of Texas A&M Geography graduates seeking employment as Geospatial Professionals in this industry; the GoGeo study, discussed below (3.5), is an example. There is substantial demand, particularly from the oil and gas industries, for these skill sets, and we have seen clear prospective student interest. Given that the demand for programs of this nature is from prospective students who are working professionals in the industry both domestically and internationally, who commonly do not find it practical to attend on campus, we were motivated to seek approvals to deliver by distance education a defined degree plan constructed from GIST-related courses which satisfy the requirements of the MGsc.

Initial discussions of distance delivery of the MGsc involved an outside vendor. However, these discussions were abandoned in August 2016 in favor of an “in-house” (within the College of Geosciences) solution. The lengthy discussions and studies generated several positive results by mid 2015. Several key ideas and processes were identified that helped informed how we developed the program, internally, starting in
August 2016: (1) external market analyses with enrollment projections and cost comparisons; (2) processes for initiating program fee approval, which we eventually obtained; (3) curricular re-focusing and organization of relevant faculty; (4) online curricular delivery approval processes; (5) engagement of two departments in a completely new venture relevant to the MGsc; (6) engagement with all university offices and functions relevant to online education from the bursar through the libraries and IT.

The outside vendor analyzed distance education possibilities of the Master’s of Science in Geology and Master’s of Science in Geophysics, in addition to the MGsc, but these two degree programs were not included in the 2016 in-house initiative.

In synthesis, several findings resulted from this period: (1) existing distance education GIST programs in the United States did not offer concentrations in the hydrocarbon sectors; (2) our distance education programs should admit students every term and provide admission decisions within two weeks of completed application; (3) students could begin the MGsc at any term in the program; (4) semesters should be divided into “A” and “B” terms, each lasting 8 weeks; (5) lead instructors should be identified several weeks in advance and should oversee instructional design and quality processes.

Planning for the in-house distance delivery of the MGsc began in August 2016 with the development of a detailed plan developed by Dr. Jack Baldauf. The Baldauf plan included several priority actions: identify faculty leads; define curriculum; establish the Distance Education Task Force (DETF); determine IT resource needs; determine a formal launch date. Major decisions made in August 2016 included identification of Dr. Andrew Klein as faculty lead, formation of the DETF (Klein; Goldberg; Filippi; Everett; Cairns; Pope); and establishment of a search committee to recruit and hire a Director of Distance Learning. We also notified the Texas Higher Education Coordinating Board of intent to deliver the MGsc electronically (Appendix B); notification was acknowledged on 20 April 2017.

### 3.2 Mission, strategic plan, and goals

#### 3.2.1 The mission of the on-campus modality of the MGsc is to prepare students for a range of careers in the Geosciences in industry, education, government, and other organizations.

#### 3.2.2 The mission of the distance modality of the MGsc is to provide students with the conceptual
grounding in Geographic Information Science and Technology (GIS&T) linked to the specific technical knowledge, skills, and abilities required of GIS professionals in the oil and gas industry. The MGsc-Geography-Distance Education program will provide its students with specific intellectual and technical foundations, a working knowledge of the oil and gas industry and its culture, as well as the critical thinking, ethics, and communication skills necessary for successful careers. Graduates of this program will be responsible leading professionals capable of solving geographic problems and driving the adoption and advancement of GIS&T across all aspects of the oil and gas industry worldwide.

Our primary learners will be professionals in the petroleum industry seeking to upgrade their skills and professionals seeking to retrain to enter or re-enter this field. These professionals are not currently on the College Station campus, thereby creating an opportunity for the College of Geosciences to broaden and deepen its educational impact by directly addressing a critical demand within the state's workforce. Students will have the flexibility to adapt the pacing of the instruction to their own needs; successful degree completion may be accomplished anywhere from 18 months to 3 years.

We will scale this model for student needs and faculty teaching loads, permitting academically qualified professionals to assist program faculty in providing rich educational experiences to students. By incorporating such an operational instructional resource model, we will enhance the program's ability to manage and scale instructional resources while consistently upholding high academic standards and accreditation requirements.

We admitted our first distance education students in June 2017 and offer our first online courses in Fall 2017.

We do not yet have a strategic plan for the distance MGsc, but we have the following success criteria that aim to prioritize a positive and transformational educational experience for our students:
- The College of Geosciences at Texas A&M University will be recognized for leading-edge geosciences education by graduating students who possess the knowledge and real world skills necessary to become thought leaders in the energy industry, measured through input from industry professionals and organizations.

- Academic standards for the online Master of Geoscience will be the same as those for the residential program originating from the College of Geosciences.

- The Program will target a student satisfaction rate of 95%, and a retention rate of 98%.

- The Program will target a faculty satisfaction rate of 95% for instructional and administrative support.

- After establishing an enrollment benchmark in year one, student enrollment growth will increase by 150% in year two, and maintain steady enrollment each subsequent year.

- The Program will follow standards and/or regulations set forth through THECB and SACSCOC.

- The Program will meet the needs of students and employers. An annual validation of curriculum will be conducted with immediate former students to gather feedback and measure the success of the program, based on their reported job placement or job advancement opportunities.

These success criteria are closely aligned to the Strategic Plan for the College of Geosciences; in particular, education goal 4 challenges us to “offer new professional masters degree options.” The action plan includes “implement online programs based on market research and employer needs.” The College Strategic Plan is included verbatim as Appendix C.

3.3 Administrative structure

3.3.1 The residential MGsc program has been highly decentralized for several years. Students are admitted into departments, but they mainly reach the MGsc because of obstacles
in their thesis-based graduate degrees. Graduate directors and faculty supervising students are key points of contact in determining their degree plans. MGsc students are subject to departmental graduate policy, rather than a centrally administered policy. A Program Committee, comprised of graduate directors of each department, was indicated in early documents, but it is not clear whether this Committee met regularly, evaluated student progress, wrote reports, or kept minutes. All the initial (ca. 1999) members of this Committee have retired or resigned from the University.

3.3.2 Responsibility for administration and implementation of the distance education MGsc falls under the Director of Distance Learning, who reports directly to the Associate Dean for Academic Affairs, and the Head of the Department of Geography, who reports to the Dean. The Director of Distance Learning, Sara Baber, hired in October 2016, supervises the Instructional Designer, LaVonne Grandy, hired in March 2017. A search for an IT specialist (see Appendix 1 for job description) was underway in June 2017.

The delivery of this program requires tenure and tenure-track (TT) faculty and academic professional track (APT) faculty with professional experience in the petroleum industry. APTs will be supported entirely by the program fee revenues. A search for an APT was

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<tr>
<th>Name</th>
<th>Title</th>
<th>Role in DETF</th>
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<tbody>
<tr>
<td>Andrew Klein</td>
<td>Professor, Geography</td>
<td>Admissions coordinator; course author; assessment liaison</td>
</tr>
<tr>
<td>Anthony Filippi</td>
<td>Associate Professor, Geography</td>
<td>Course Author</td>
</tr>
<tr>
<td>Daniel Goldberg</td>
<td>Assistant Professor, Geography</td>
<td>Course Author</td>
</tr>
<tr>
<td>Mark Everett</td>
<td>Graduate Director, Geology and Geophysics</td>
<td>Geology and Geophysics representative</td>
</tr>
<tr>
<td>Mike Pope</td>
<td>Department Head, Geology and Geophysics</td>
<td>Geology and Geophysics representative; assign faculty teaching duties</td>
</tr>
<tr>
<td>David Cairns</td>
<td>Department Head, Geography</td>
<td>Geography representative; assign faculty teaching duties</td>
</tr>
<tr>
<td>Sara Baber</td>
<td>Director of Distance Learning</td>
<td>Oversees course sections, instructional design, compliance</td>
</tr>
<tr>
<td>LaVonne Grandy</td>
<td>Instructional Designer</td>
<td>Course development</td>
</tr>
<tr>
<td>Robyn Blackmon</td>
<td>Communications Manager</td>
<td>Marketing strategy</td>
</tr>
<tr>
<td>Paul Stine</td>
<td>IT Manager</td>
<td>IT implementation</td>
</tr>
<tr>
<td>Barbara Bayer</td>
<td>Assistant Dean for Finance and Administration</td>
<td>Budget development; program fee management</td>
</tr>
<tr>
<td>Christian Brannstrom</td>
<td>Associate Dean, Academic Affairs</td>
<td>Course approvals, supervises Director of Distance Learning</td>
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</table>
underway in June 2017 (see Appendix 1 for job description). TT faculty will be instrumental in developing the online versions of current courses. Course development and professional development will ensure high quality online offerings. Graduate assistants will be needed for teaching support.

The distance education MGsc is administered by a Distance Education Task Force (DETF). The DETF composition is provided in Table 3-1. Faculty members who are course authors are included. Department Heads of Geography and Geology and Geophysics are included because of their role in supervising faculty and because the MGsc students are admitted to academic departments. Staff members with responsibility for finance and information technology are involved in the DETF.

The DETF began regular meetings on 9 December 2016; since then, the DETF has made several decisions:

- selection of Canvas as the learning management system (LMS) for this program;
- the creation of the application pathway in ApplyTexas and application requirements;
- determination of application review procedures;
- development of a detailed budget;
- success criteria used to support a successful resource request from the Provost’s office;
- selection of an IT solution to curricular needs and resource constraints;
- development of a marketing plan with internal and third-party resources.

In determining the application pathway we were required to follow protocols identical to the residential

**Figure 3-1.** Screenshot from ApplyTexas showing drop-down options, which include the “Geography-online” option for the MGsc.
MGsc, whereby applicants are admitted to a department in the College of Geosciences. The resulting application pathway indicates that students apply to the current distance modality of the MGsc through the Department of Geography. To applicants, the pathway appears in Figure 3-1. Guidance on navigating ApplyTexas are provided on geosonline.tamu.edu under “How to Apply.”

We anticipate that the DETF will continue to develop and oversee distance education implementation as we consolidate the MGsc-Geography-Online and develop content reliant on the Geology and Geophysics curriculum.

### 3.4 Facilities and finances

3.4.1 Facilities for the residential MGsc are located in individual departments.

3.4.2 Facilities for the distance modality of the MGsc are considerably different because of the role of College staff in administering the program. Office space in the O&M Building are devoted to the Director of Distance Learning and the Instructional Designer. We anticipate making additional office space available for a Program Coordinator who would work exclusively with the distance MGsc, allowing the Director of Distance Learning to assist faculty in developing new distance programs. Server needs are being met by Amazon Web Services rather than through in-house resources and facilities.

Finances for the distance modality of the MGsc are provided in Table 3-2. The main items in this budget include:

- estimated unduplicated enrollment 58 in FY18, 151 in FY19, and 200 in FY20. We project stability at 200 students past FY20.

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<thead>
<tr>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
<th>FY22</th>
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<td>Yr 0</td>
<td>Yr 1</td>
<td>Yr 2</td>
<td>Yr 3</td>
<td>Yr 4</td>
<td>Yr 5</td>
</tr>
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</table>

- administrative support cover salaries and benefits for a Director of Distance Learning, an Instructional Design staff member, a business staff member, a program coordinator, and recruiting.

<table>
<thead>
<tr>
<th>CLGE Program Fee (per SCH) Revenues</th>
<th>-</th>
<th>189,082</th>
<th>503,601</th>
<th>681,502</th>
<th>697,724</th>
<th>714,599</th>
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<tr>
<td>Expenses</td>
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<tr>
<td>Total Admin support</td>
<td>184,576</td>
<td>323,840</td>
<td>333,555</td>
<td>343,562</td>
<td>353,869</td>
<td>364,485</td>
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<tr>
<td>Total Teaching support*</td>
<td>24,000</td>
<td>191,514</td>
<td>189,568</td>
<td>195,568</td>
<td>189,568</td>
<td>195,568</td>
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<tr>
<td>Total Marketing support</td>
<td>42,000</td>
<td>28,000</td>
<td>23,000</td>
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<tr>
<td>Total Operational Expenses</td>
<td>30,000</td>
<td>30,000</td>
<td>25,000</td>
<td>35,000</td>
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<td>Total Technology Support</td>
<td>54,031</td>
<td>124,441</td>
<td>156,991</td>
<td>152,339</td>
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<td>146,195</td>
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<td>Expense Total</td>
<td>334,607</td>
<td>697,795</td>
<td>728,114</td>
<td>749,469</td>
<td>747,632</td>
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<td>Net Cash Flow</td>
<td>(334,607)</td>
<td>(508,713)</td>
<td>(224,513)</td>
<td>(67,967)</td>
<td>(49,908)</td>
<td>(49,649)</td>
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*fluctuations due to staggered course refresh costs
specialist.

- teaching support covers salary for a non-tenure track instructor (Position Description in Appendix A), graduate assistants, and faculty development funds to support Quality Matters certification, course development, and course “refresh.”

- Marketing expenses support staff and contracts with third-party vendors (discussed in the section 3.6 below on Marketing)

- Technology support covers software licenses, technical support staff, and expenses associated with contracts with Amazon Web Services.

In early 2017, the Provost provided resources to cover a portion of the initial three-year resources necessary to start-up the distance MGsc. The funds are critical for the purchase of hardware, software licenses, marketing, staff salaries, and instructional support necessary to further develop and deliver an exceptional, high-quality distance education Master of Geoscience curriculum.

### 3.5 GoGeo Project

The GoGeo Project represents a major investment in defining the potential need for the distance MGsc focusing on GIST and the petroleum industry. The GoGeo project aimed to assess educational needs of the oil and gas industry. This project, led by Klein, Goldberg, and IntegraShare staff, collected data from GIS professionals in oil and gas starting in January 2016 through an online survey. Based on responses (n=73) obtained by April 2016 and follow up in-person interviews (n=22), the main findings are as follows:

- GIS use in oil and gas firms represented in the sample is expected to increase;

- the top three areas of desired GIS skills were GIS data management, GIS data creation and editing, geodesy, and cartography and visualization. Each of these skill area received more than 60% of respondents indicating “very important” for a new GIS professional.

- in-person interviews revealed the need for students to have in-depth knowledge of the oil and gas industry, in addition to geospatial subject knowledge, and base understanding of information technologies supporting GIS.

- respondents indicated the importance of internships because of the opportunity to hire well
suited employees and reducing hiring risk.

-respondents indicated the need for student training to include workplace simulation in aims of increasing assimilation of new employees

3.6 Marketing Plan

The distance education MGsc is especially appropriate for experienced professionals in geoscience or related fields seeking a professional Master’s degree. A structured degree program is defined around advanced coursework in Geographic Information Science and Technology oriented to the oil and gas industry. Therefore, we cannot rely on normal means for attracting students to this program.

The marketing plan for the online MGsc using in-house resources and a third-party vendor aiming to obtain market share through web search optimization and publications. The plan’s primary goal was to driver inquiry conversion to application submission, aiming to achieve a class size of 50-80 students in by Fall 2018. The secondary goal was to increase brand awareness among the target audience. The target audience is defined by age (25-60 years old), education (4-year college degree), and employment in a geosciences field as defined by several Standard Occupational Classifications (Petroleum Engineer; Geoscientist; Geographer; Geological and Petroleum Technicians). The marketing campaign will ran from 1 April 2017 to 1 August 2017, which included a major petroleum industry conference in Houston in early April 2017, an ESRI conference in July 2017, and the application deadline in early August 2017. Approximately 90% of the marketing resources are dedicated to driving traffic to geosonline.tamu.edu through digital media, including SEO optimization, advertising in Facebook, Twitter, and LinkedIn, and partnerships with the American Association of Petroleum Geologists (AAPG), the American Geophysical Union (AGU), and earthmagazine.org. Approximately 10% of the marketing resources were devoted to print media in partnership with the AAPG, AGU, and ESRI.

Images produced for this marketing campaign are provided on the following pages (Figures 3-2 to 3-5).

3.7 Accreditations and date of last APR external review

There is no external program accreditation for the MGsc. The MGsc has not been reviewed previously by an external review team.

3.8 Analysis

We have a clear set of success criteria, highly motivated staff and faculty, and strong alignment with perceived workforce need in the oil and gas industry. We are tightly aligned with our College’s strategic plan and have received strong and continued support from Deans of the College of Geosciences. All of these factors indicate high likelihood for meeting or exceeding our success criteria. We have
Figure 3-2. Image created to support the Geoscience website for the MGsc marketing campaign.

Figure 3-3. Timeline for the MGsc marketing campaign, April-August 2017.

<table>
<thead>
<tr>
<th>Weeks Beginning Monday</th>
<th>MAR 27 6 13 20</th>
<th>APR 27 5 10 17 24</th>
<th>MAY 1 8 15 22 29</th>
<th>JUN 5 12 19 26 3</th>
<th>JUL 10 17 24 31</th>
<th>AUG 7 14 21</th>
<th>Weeks On</th>
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<td><strong>Key Dates</strong></td>
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<td>In-State &amp; Out-of-State Markets Only</td>
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<td><strong>Google AdWords</strong></td>
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<td>In-State Markets Only</td>
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<td><strong>Total Spend</strong></td>
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</table>

ACE 2017

sustained levels

Priority Deadline

heavy-up

Priority 2 Deadline

4/1 - 7/30

27.5

4/1 - 7/30

27.5

7

4/1 - 7/30

20
Figure 3-4. Facebook feed from applicant, showing result of marketing campaign for the MGsc program.

Texas A&M Geosciences

Add Geographic Information Science & Technology expertise to your petroleum industry skills with a Master of Geoscience at the World-Class Texas A&M University.

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made rapid progress since moving away from a third-party vendor, focusing on our internal resources with support from the Provost to meet initial cash-flow deficits. The Distance Education Task Force provides a setting for faculty and staff to discuss challenges and solutions in the roll-out of the distance MGsc.
4. Academic Programs and Curricula

The MGsc is a non-thesis 36-hour program. Differences exist between the on-campus MGsc and the distance MGsc.

4.1 On-Campus MGsc

The on-campus MGsc is a non-thesis, 36-hour program. Admitted students form an advisory committee comprised of at least three members of the graduate faculty representative of the student’s fields of study and research. The chair or one of the co-chairs of the advisory committee must be from the student’s “home” department. The “home” department must be one of the two areas of specialization comprising the major. At least one or more of the members must have an appointment to a department other than the student’s “home” department. Committee members must approve the selection of courses comprising the 36 hours of coursework.

MGsc students are required to take at least 18 hours of credit in Geosciences in two areas of specialization (Atmospheric Sciences, Geography, Geology and Geophysics and Oceanography). A specialization consists of at least 6 credit hours. In addition, a student is required to complete a 6 credit hour supporting field in a discipline other than the two specialization fields. Students in the on-campus MGsc are also required to pass a final examination. The final examination covers all work taken on the degree plan and at the option of the committee may be written or oral or both. The examination is conducted by the student’s advisory committee as finally constituted.

4.2 Distance MGsc

The distance version of the MGsc requires a defined degree plan indicated in Table 4.1. This defined degree plan includes coursework focused on GIST offered in a “carousel” model in compressed eight-week sessions. Students may enter the program in fall, spring, or summer terms (graphical display of the schedule is provided in Appendix D. The degree plan also requires a capstone project course that has a highly recommended face-to-face component to foster collaborative group exercises and simulate industry conditions and settings. The final examination for the MGSC degree is embedded in this course. The minimum requirements for the degree are 36 hours of coursework. The student is required to fulfill a capstone course in which an on-campus presence is encouraged but not required. No final examination
Students admitted to the distance education modality are housed in the Department of Geography. The distance education modality requires an advisory committee to be comprised by the designated coordinator of the distance education in the Department of Geography and the Department Head of the Department of Geography.

No degrees have been awarded to students in the Distance Education modality.

4.3 Academic enhancements to the Distance MGsc

We have made academic enhancements to the MGsc in areas of compliance, quality assurance, instructional design, and accessibility.

Since April 2017, a sub-group of the DETF has focused on resolving implementation issues by working with the Canvas team, focusing on: importing student identification data; authentication protocol; branding; support; and training. As of June 2016, this sub-group has collaborated with the Director of the Provost IT Office (PITO) in the following areas that will ensure compliance with SACS/COC:

- A Project Manager has been assigned to assist us with

<table>
<thead>
<tr>
<th>Course Code (Credit Hours)</th>
<th>Course Title</th>
<th>Scheduled Term</th>
<th>Course Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEOG 660 (3)</td>
<td>Applications in GIS</td>
<td>Fall 2017-A, Spring 2018-A, Summer 2018-A, Fall 2018-A</td>
<td>Andrew Klein</td>
</tr>
<tr>
<td>GEOG 651 (3)</td>
<td>Remote Sensing</td>
<td>Fall 2017-B, Spring 2018-B, Summer 2018-B</td>
<td>Anthony Filippi</td>
</tr>
<tr>
<td>GEOG 659 (3)</td>
<td>GeoDatabases</td>
<td>Fall 2017-B, Summer 2018-B, Fall 2018-B</td>
<td>Daniel Goldberg</td>
</tr>
<tr>
<td>GEOG 689* (3)</td>
<td>GIS in Petroleum</td>
<td>Spring 2018-A, Summer 2018-A, Fall 2018-A</td>
<td>Daniel Goldberg</td>
</tr>
<tr>
<td>GEOG 665 (3)</td>
<td>GIS Modelling</td>
<td>Spring 2018-A, Summer 2018-A, Fall 2018-A</td>
<td>Anthony Filippi</td>
</tr>
<tr>
<td>GEOL 619 (3)</td>
<td>Petroleum Geology</td>
<td>Spring 2018-B, Summer 2018-B, Fall 2018-B</td>
<td>TBD</td>
</tr>
<tr>
<td>GEOG 662 (3)</td>
<td>GIS in Land Management</td>
<td>Spring 2018-B, Summer 2018-B, Fall 2018-B</td>
<td>Anthony Filippi</td>
</tr>
<tr>
<td>GEOG 676 (3)</td>
<td>GIS Programming</td>
<td>Summer 2018-A, Fall 2018-A</td>
<td>Daniel Goldberg</td>
</tr>
<tr>
<td>GEOG 678 (3)</td>
<td>WebGIS</td>
<td>Summer 2018-B, Fall 2018-B</td>
<td>Daniel Goldberg</td>
</tr>
<tr>
<td>GEOS 689 (6)</td>
<td>Capstone</td>
<td>Fall 2018-A+B</td>
<td>MGsc core faculty</td>
</tr>
</tbody>
</table>

TOTAL = 36 hours

*689 designation is “special topics” which awaits a permanent course number.
compliance regarding student authentication and student privacy;

- PITO has provided us with a list of detailed security control and practice questions to answer;

- We are in process of obtaining criteria for CAS authentication;

- A FERPA Addendum has been signed and forwarded to TAMU Contracts Administration for approval;

- We are planning for future Banner/SIS integration with the Canvas LMS – student enrollment data protection;

- We have initiated plans to receive approval to place TAMU student data into Canvas.

Course design will follow the Quality Matters (QM) process, an internationally recognized, standards-based program that focuses on continuous improvement, and will enhance and support quality assurance for this online program in compliance with University-level accreditation processes (Appendix E).

Faculty may offer their courses for peer review, with the goal being to have components in alignment with QM standards as supported by best practices in the research literature. The benefits of using QM during course design and review are directed at improving learning outcomes for online students through quality course design. The peer review process uses a rubric and emphasizes an attitude of continuous improvement in course design until a level of “meeting expectations” is achieved.

The instructional design progress includes clearly identified timelines shown in Appendix F. In summary, the timelines outline the steps that course authors and the instructional designer must take to develop an online course in Canvas. For example, the Fall A timeline begins in the 15 May-9 June period, during which time the instructional designer works with course authors to develop a module-based course outline with learning outcomes, curate resources, and obtaining necessary Canvas trainings. During 12 June-22 June, an introductory module should be completed and some materials should loaded into Canvas. During 26 June-27 July, course modules should be prepared and course materials uploaded.

Canvas, the learning management system we selected for the distance education MGsc, includes the Voluntary Product Accessibility Template (VPAT), which allows program administrators to evaluate compliance with statutory demands for accessibility. Canvas supports several screen reader and browser combinations, such as VoiceOver (Macintosh/Safari); JAWS (PC/Internet Explorer 11); NVDA (PC/Firefox). There is no screen reader support for Canvas in Chrome.

The Canvas Rich Content Editor supports multiple accessibility features including: ALT text for images; headings for table columns; audio
recording and uploading to add information. Canvas also supports a High Contrast setting for low-vision or color blindness. Support for browser size and scale for frames.

For hearing impaired students, Canvas includes captioning in Rich Txt Editor for any audio or video files, offering a tool to create and upload subtitles. For mobility impairments, Canvas supports keyboard shortcuts for navigation that do not require fine motor-skills. For students with accommodation requirements including more time for quizzes and exams, the Quiz Moderation tool in Canvas allows for quizzes to have extra time.

4.4 Assessment of student learning outcomes

4.4.1 Assessment of the residential MGsc includes three Outcomes/Objectives: (1) Communicate effectively (students will communicate effectively through written work, oral presentations, and appropriate visualizations); (2) Master knowledge (master degree program requirements by developing a coherent understanding of the subject matter by synthesizing across courses and experiences); (3) Conduct research (students will conduct clear, well-planned and ethical research using appropriate technologies analyzing and integrating information in a final project).

Measures and findings cover three areas:

- Disciplinary expertise: Graduates will demonstrate mastery and expertise of disciplinary knowledge by explanation and application of key concepts and practices in at least one field of geosciences (geography; geology; oceanography; atmospheric sciences). The target for “Master knowledge” is that 90% of all MGsc students will score 80% or higher on element #4 (mastery of the sub-field) on the Final Examination Assessment (Appendix G) completed by the advisory committee, using a 3 year running mean. The rubric for assessment is provided in Appendix G.

- Communicate effectively: Students will master and communicate an understanding of the principles of one sub-field of geosciences. The target for “communicate effectively” is that 90% of all MGsc students will score 80% or higher on element #1 (verbal
communication) and on element #2 (written communication) on the Final Examination Assessment (Appendix G) completed by the advisory committee, using a 3 year running mean.

-Supervised research: Students will demonstrate the ability to conduct research under the supervision of a faculty member in Geosciences. The target for “supervised research” is that 90% of all MGS students will score 80% or higher on element #3 (demonstration of research) on the Final Examination Assessment (Appendix G) completed by the advisory committee, using a 3 year running mean.

We do not have findings to report because the assessment and rubric have not been used on MGsc students in their final examination. Reasons for limited assessment at the final examination include lack of understanding among graduate directors and faculty advisors about the assessment needs of the MGsc; this, in turn, is a product of the relatively low demand for this degree and the fact that it has primarily been sought as a second option to a thesis-based Master’s or Doctoral degree.

4.4.2 We have integrated the distance MGsc program and course-level learning objectives using the Outcomes tool in Canvas, used in conjunction with the Rubrics and Learning Mastery gradebook. This integration allows us to track and report student learning outcomes and ensures the alignment of the courses in the program with the overall MGsc goals. At any point during student progress toward degree, we will be able to collect data across the program, within courses and even obtain data on individual student progress.

Instructors of distance courses in the MGsc will employ various assessment methods in their Canvas courses to measure student performance against the Program/Course/Module level learning objectives; these methods include quizzes, papers, live and/or recorded oral presentations, and graded discussion posts.

At the course level, instructors will outline the learning objectives on their syllabi and map them to assessments that are delivered throughout the semester, enabling students to see how concepts are introduced and reinforced throughout the semester. Students will also be able to track their progress and performance.
<table>
<thead>
<tr>
<th>Competency (No.)</th>
<th>Outcome (No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical GIS&amp;T (C1)</td>
<td>Determine and apply appropriate spatial-analysis and modeling techniques to solve geographic problems across the industry domain (1)</td>
</tr>
<tr>
<td></td>
<td>Create traditional and digital cartographic products that communicate the intended message in an audience-appropriate manner by applying cartographic knowledge and techniques (2)</td>
</tr>
<tr>
<td></td>
<td>Perform geospatial data-management tasks including capture, editing, and curation of geographic information and selection of appropriate data models for specific industry domains and applications (5)</td>
</tr>
<tr>
<td></td>
<td>Design and execute programs, code, and workflows in appropriate languages and systems to solve spatial-analytical and common data-management tasks (4)</td>
</tr>
<tr>
<td></td>
<td>Appropriately apply geodesic knowledge and techniques within an industry context (5)</td>
</tr>
<tr>
<td></td>
<td>Utilize digital-image processing to perform standard remote-sensing tasks (6)</td>
</tr>
<tr>
<td></td>
<td>Evaluate the usefulness of common remote-sensing data types for specific industry applications (7)</td>
</tr>
<tr>
<td></td>
<td>Critically assess technological, data, model, and analysis applicability for achieving specific goals (8)</td>
</tr>
<tr>
<td></td>
<td>Adapt to and adopt emerging technologies and infrastructures to keep pace with the changing industry landscape (9)</td>
</tr>
<tr>
<td>Industry Specific (C2)</td>
<td>Explain the components and makeup of the oil and gas industry, the roles of GIS across the industry and through the Oil Field Life Cycle, and how it complements other technologies and industry disciplines to provide a return on investment in upstream, midstream, downstream, and other industry sectors (1)</td>
</tr>
<tr>
<td></td>
<td>Describe the interactions between different industry sectors and how they apply to GIS (2)</td>
</tr>
<tr>
<td></td>
<td>Explain how GIS is structured differently within organizations and industry sectors and the impacts this may have on GIS utilization and development within different corporate contexts (3)</td>
</tr>
<tr>
<td></td>
<td>Summarize the prevailing culture of the Oil &amp; Gas industry and critique how it aligns the strengths, aptitudes, and career aspirations of the learner (4)</td>
</tr>
<tr>
<td>Soft Skills (C3)</td>
<td>Demonstrate ability to communicate through the written word, verbally, and graphically as well as the ability to listen (1)</td>
</tr>
<tr>
<td></td>
<td>Demonstrate ability to communicate across different disciplines (2)</td>
</tr>
<tr>
<td></td>
<td>Demonstrate ability to work constructively as a member of a team, as well individually (3)</td>
</tr>
<tr>
<td></td>
<td>Demonstrate the application of critical thinking to industry relevant scenarios (4)</td>
</tr>
<tr>
<td></td>
<td>Choose ethical courses of action (5)</td>
</tr>
</tbody>
</table>
We have identified three competencies: Technical GIST; Industry Specific; Soft Skills. These competencies are used to organize the Outcomes, listed in Table 4.2.

Our Rubrics will rely on a 5-point scale with easily identifiable descriptions for each learning outcome. Since learning outcomes in a particular program are assessed across multiple courses, it will be important to implement a method that is both easy to read and use for both students and faculty.

**4.5 Analysis**

We have made considerable investments in development of course roll-out and curriculum design for the distance MGsc focused on defined GIS&T coursework. Assessment of the distance MGsc links learning outcomes from individual courses to program-level outcomes. We have anticipated University-level compliance demands and accessibility requirements.
5. Faculty Profile

The core faculty for the distance modality of the MGsc are Anthony Filippi, Daniel Goldberg, and Andrew Klein. Full CVs for these faculty members are provided in Appendix A. As of June 2017, we are in process of hiring non-tenure track instructors. The advertisement for one position is in Appendix A. A summary of the core faculty accomplishments in the past five years is given below.

Anthony Filippi is an associate professor in the Department of Geography. After receiving his PhD from the University of South Carolina, he was appointed Assistant Professor of Geography at Texas A&M University in 2003. His recent publications focus on hyperspectral remote sensing applications and adding remote sensing expertise in collaborations on land change science and fluvial morphodynamics. His recent grants include NASA-funded work on afforestation in India and other sponsored work on dryland systems and wetland rice systems. Dr. Filippi’s teaching at undergraduate and graduate levels since Fall 2012 has include remote sensing, GIS analysis, advanced topics, and the GIS practicum (see Appendix H).

Daniel Goldberg is an assistant professor in the Department of Geography. After receiving his PhD from the University of Southern California in 2010, he was the associate director of the USC GIS Research Laboratory until 2012, when he was appointed assistant professor at Texas A&M University. His recent publications focus on GIS education, geocoding, and GIS application in health geographies. His research has been funded by through sub-awards from the National Institutes of Health and National Science Foundation, among other agencies. Dr. Goldberg’s teaching include introductory GIS, GIS applications, webGIS, geodatabases, and GIS programming (see Appendix H).

Andrew Klein is a professor and the EOG Teaching Professor in Geosciences. After receiving his PhD from Cornell University, Dr. Klein was appointed Assistant Professor in Geography at Texas A&M University in 1998s. His most recent publications focus on monitoring of human impacts at McMurdo Station, Antarctica and analyzing changes in glacial ice and shoreline changes in numerous settings. His grants include collaboration with scholars on long-term monitoring of Antarctica and developing programs for middle and high school teachers. Dr. Klein’s teaching includes the introductory cartography course, principles of GIS, the GIS practicum, GNSS, and GIS applications (see Appendix H).
6. Student Profile

6.1 On-campus MGsc students

Between 2002 and 2016, 111 applicants have applied to the on-ground MGsc, although we do not have data on the desired academic department (Table 6.1). Twenty-three of the 111 applicants were admitted and 15 eventually enrolled. Data for the most recent application cycle, 2016-2017, indicate that 10 students (2 ATMO; 8 GEPL) applied to the MGsc out of a total of 336 applicants to all graduate programs in the Geosciences. (These numbers do not reflect applicants to the distance education MGsc, which opened to applicants after the on-ground application cycle was completed.)

Several possible explanations help explain why so few applicants were admitted. Graduate directors may have encouraged students to switch their applications to the thesis-based Master’s degrees offered in their departments. Applicants may have erroneously applied to the MGsc instead of the thesis-based Master’s degrees offered in academic departments. Applicants to the MGsc did not offer a research profile attractive to possible advisors, who play a crucial role in the application stage. Finally, assistantships probably were not offered to admitted MGsc students, either because these students did not present competitive academic credentials, or because departments prioritized assistantships to students pursuing thesis-based Master’s work or to doctoral students. This explanation is perhaps the most compelling because graduate teaching assistant funding moves in pass-through basis from the College to academic departments to support lab-based instruction. Typically, departments allocate these limited resources on a competitive basis to their top applicants in the event that research assistantships (funded through start-up or external research awards) are not available. It is highly likely that department prioritized thesis-based Master’s students and doctoral students over non-thesis MGsc students in the allocation of assistantships.

Table 6.2 provides data on number of degrees awarded per academic year starting in 2010-2011. We have awarded 13 MGsc degree since 2010-2011. Some of these students intended to receive the MGsc at time of application, while others received this degree because their thesis-based degree was not obtainable owing to financial problems, collapse of research project, or other obstacle. We sought data from faculty on 31
MGsc students who received their degree or were in progress since 2005. Of the 31 students, we identified six students who intentionally received the MSsc. Two of these six students sought the degree because they wanted to teach high school science or earth science; at least one continued to the PhD in Geography. Eleven of the 31 students received the MGsc because they did not complete the thesis requirements in their academic discipline. Reasons for not completing a thesis include experimental problems, funding limitations, and low aptitude for research. One of the 31 students received the MGsc because she did not meet English language requirements to receive a teaching assistant award. Two of the 31 students intended to receive a non-thesis MS in Geography, but were accidentally placed into the MGsc. We lack data on 10 students of the 31; one reason for lack of data on these students is the likelihood that supervising faculty were separated from the University at time of this data request.

Appendix I provides data on retention and graduation rates of MGsc students.

Table 6.1. Number of applicants, admitted students, and enrolled students in the MGsc, 2002-2016.

<table>
<thead>
<tr>
<th>Year</th>
<th>Applicants</th>
<th>Admitted</th>
<th>Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>2002</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2003</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2004</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2005</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2006</td>
<td>4</td>
<td>2</td>
<td>2</td>
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<td>2007</td>
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<tr>
<td>2009</td>
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<tr>
<td>2010</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2011</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>2012</td>
<td>13</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>2013</td>
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</tr>
<tr>
<td>2016</td>
<td>5</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>66</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 6.2 Average time to degree (years), MGsc.

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Degree Count</th>
<th>Year to Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>3</td>
<td>3.17</td>
</tr>
<tr>
<td>2011-12</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2012-13</td>
<td>5</td>
<td>2.6</td>
</tr>
<tr>
<td>2013-14</td>
<td>2</td>
<td>1.75</td>
</tr>
<tr>
<td>2014-15</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2015-16</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

6.2 Distance MGsc students

As of August 2017, 28 students have started applications in ApplyTexas. Twenty-six applicants have completed their applications and were admitted to the MGsc-Geography-Distance to start
in August 2017. The remaining two applicants are waiting to complete their applications for enrollment in January 2018.

### 6.3 Analysis

Decentralization of the residential MGsc has made it difficult to obtain data on student employment. Data from faculty indicate that many students obtaining the MGsc have opted for this degree because of problems in obtaining their intended degree, normally a thesis-based Master's or Doctoral degree. It appears as though the original intent of the residential MGsc—to offer high school teachers the ability to advance their knowledge of the geosciences—has not been realized, perhaps because of weak marketing efforts, the inability to offer significant coursework in summer terms, and previous lack of distance education efforts.

By contrast, faculty and staff involved in the distance MGsc have more clearly identified a workforce need and have deployed a well developed marketing strategy aimed to reach professionals who desire advanced GIS&T training and credentials.
7. Concluding Observations

We have developed a distance education non-thesis MGsc, initially focused on Geographic Information Science and Technology (GIS&T), to increase skills and knowledge of professionals in Texas and beyond. We aim to enroll approximately 200 students within 3 years. Our marketing strategy aims to attract professionals in the petroleum industry seeking to upgrade their skills and professionals seeking to retrain to enter or re-enter this field. We admitted 26 distance education students to start in August 2017. Two additional students have pending applications to start in January 2018. As we consolidate our offerings in GIS&T and develop our first student cohorts in the MGsc-Geography-online degree program, we look forward developing another distance degree plan emphasizing coursework in a Geology and Geophysics version of the MGsc.
PROFESSIONAL PREPARATION


Visiting Graduate Student. 1998. School of Oceanography, University of Washington, Seattle, WA, USA.

M.S. 1998. Department of Geography, University of South Carolina (USC), Columbia, SC, USA. Advisor: Dr. John R. Jensen.

B.A. 1995. Summa cum laude, Geography major, 1995, Kansas State University (KSU), Manhattan, KS, USA.

APPOINTMENTS

2010–Present Associate Professor, Department of Geography, College of Geosciences, Texas A&M University (TAMU), College Station, TX.

2003–2010 Assistant Professor, Department of Geography, College of Geosciences, Texas A&M University (TAMU), College Station, TX.

2015–Present Adjunct Associate Professor, Department of Biological and Environmental Sciences, College of Arts and Sciences, Qatar University, Doha, Qatar.

Summer 2008 Faculty Fellow, Oak Ridge National Laboratory*

Summer 2007 Faculty Fellow, Oak Ridge National Laboratory*

Summer 2006 Faculty Fellow, Oak Ridge National Laboratory*

Summer 2005 Faculty Fellow, Oak Ridge National Laboratory*

* Higher Education Research Experiences at Oak Ridge National Laboratory (HERE@ORNL) for Faculty program, Geographic Information Science & Technology Group, Computational Sciences & Engineering Division, ORNL, Oak Ridge, TN, USA.

2002–2003 Visiting Assistant Professor, Department of Geography, College of Geosciences, Texas A&M University, College Station, TX.

2002–2003 Consultant, Westinghouse Savannah River Company, Projects at Department of Energy (DOE) Savannah River Site (SRS)/Savannah River National Laboratory (SRNL), Aiken, SC and the EPA Monticello UMTRA/ACAP Waste Site, Monticello, UT.

**PROFESSIONAL EXPERIENCE**

2000 **Technician**, Field Data Collection, Department of Geography, USC, Columbia, SC.

1997–1999 **Graduate Research Assistant**, Department of Geography, USC, Columbia, SC.

1995–1996 **Graduate Teaching Assistant**, Department of Geography, USC, Columbia, SC.

Summer 1996 **Field Assistant**, Department of Geography, USC, Columbia, SC.

1994–1995 **GIS Analyst**, GIS Spatial Analysis Laboratory (GISSAL) State Soil Survey, Department of Geography, KSU, Manhattan, KS.

Summer 1994 **Undergraduate Assistant**, Department of Geography, KSU, Manhattan, KS.

Spring 1994 **Intern, National Geographic Society**, Cartographic Division, Washington, D.C.

Summer 1993 **Undergraduate Assistant**, Department of Geography, KSU, Manhattan, KS.

**FELLOWSHIPS, HONORS, AND AWARDS**


2002 *Student Paper Award*, 2002 Annual Meeting, South Carolina Academy of Science, USC, Aiken, SC.

1999–2002 *NASA Graduate Student Researchers Program (GSRP) Fellow*, NASA John C. Stennis Space Center, Stennis Space Center, MS, and the University of South Carolina (USC), Columbia, SC.

Spring 1999 **Travel Grant**, Department of Geography, USC, AAG Annual Meeting, Honolulu, HI.

Spring 1999 **Travel Fellowship**, Graduate School, USC, AAG Annual Meeting, Honolulu, HI.

Summer 1998 *Office of Naval Research (ONR) / NASA Fellow*, Optical Oceanography, Friday Harbor Laboratories, University of Washington, San Juan Island, WA.

Summer 1998 *Selected Intern, USRA/NASA GSFC Graduate Student Summer Program in Earth System Science*, NASA Goddard Space Flight Center (GSFC), Greenbelt, MD, (Note: Did not participate due to schedule conflict with ONR/NASA Fellowship).

Spring 1998 **Travel Grant**, Department of Geography, USC, Association of American Geographers (AAG) Annual Meeting, Boston, MA.


Spring 1996 **Honors Pass**, Master's Comprehensive Exam, Department of Geography, USC.

Spring 1995 **AAG Award for Excellence of Scholarship**, National Council for Geographic Education.


1992–1993 *Homer C. Wood Scholarship*, KSU.

1992–1993 *Nannie Beisley Scholarship*, KSU.

Anthony Filippi
Page 2
RESEARCH INTERESTS

Remote sensing / imaging spectroscopy, environmental and hydrologic/ocean optics, geographic information system (GIS)-based modeling, machine learning, vegetation mapping, river floodplains, and coastal studies

PEER-REVIEWED PUBLICATIONS

1. PEER-REVIEWED JOURNAL ARTICLES

*denotes student


2. OTHER PEER-REVIEWED PUBLICATIONS


NON-PEER-REVIEWED PUBLICATIONS

1. BOOK CHAPTERS


2. CONFERENCE PROCEEDINGS


3. TRADE PUBLICATIONS


4. TECHNICAL REPORTS


Anthony Filippi
Page 6

INVITED PRESENTATIONS / WORKSHOPS

15. Department of Marine Biology, Texas A&M University at Galveston

2017. Filippi, A. M. Machine learning-based high-dimensional remote sensing of the coastal zone. Department of Marine Biology, Texas A&M University at Galveston, Galveston, TX, Fall, 2017. INVITED presentation.

14. Department of Civil, Environmental, and Mechanical Engineering, University of Trento, Italy


13. The American Institute of Aeronautics and Astronautics (AIAA) / NASA


12. Center for Geospatial Science, Applications and Technology (GEOSAT), Texas A&M University

2015. Filippi, A. M. Advances in high-dimensional remote sensing of vegetation. GEOSAT Seminar Series, Center for Geospatial Science, Applications and Technology (GEOSAT), Texas A&M University, 29 October 2015. INVITED presentation.

11. Geochemical & Environmental Research Group (GERG) / Texas A&M Engineering Experiment Station (TEES) Center for Autonomous Vehicles and Sensor Systems


10. Texas A&M AgriLife/Texas A&M Engineering Experiment Station (TEES)

Total number of GEOG 491 students: 8 (Summer I 2010 (1); Spring 2011 (1); Spring 2012 (1); Spring 2013 (1); Fall 2013 (1); Fall 2016 (1); Spring 2017 (2))

Total number of GEOG 685 students: 16 (Fall 2004 (2); Spring 2006 (1); Fall 2006 (2); Spring 2009 (1); Fall 2009 (1); Spring 2010 (1); Fall 2011 (1); Spring 2012 (1); Fall 2012 (1); Fall 2013 (1); Spring 2014 (1); Fall 2014 (1); Fall 2016 (2))

(Number of students indicated in parentheses)

GEOG 476 is a Writing-Intensive course

Teaching Releases
Fall 2002: One course; Fall 2007: One course; Spring 2008: Two courses; Spring 2009: One course; Fall 2013: Two courses

Teaching Overloads
Fall 2006: One additional course (i.e., three total courses taught)

Graduate Student Committees (as of 02/10/2017)

Total committees upon which I have served or am serving as a member, co-chair, or chair: 86
M.S. committees: 50; Ph.D. committees: 36
Number of committees Chaired: 3 (M.S.: 2; Ph.D. 1)
Number of committees Co-Chaired: 9 (M.S.: 7; Ph.D.: 2)

Graduate Students Supervised

Ma, Andong (Ph.D.), Chair (in-progress)
Chen, Xingchen (M.S.), Chair (Co-Chaired with Dr. İnci Güneralp) (in-progress)
Caraway, Madalyn (M.S.), Co-Chair (Co-Chaired with Dr. İnci Güneralp) (in-progress)
Guenther, Eric (M.S.), Chair (Co-Chaired with Dr. Burak Güneralp) (in-progress)
Yi, Hoonchong (Ph.D.), Chair (Co-Chaired with Dr. Burak Güneralp), graduated 05/2017, current position/affiliation: Post-doctoral Fellow, Dept. of Ecosystem Science and Management, TAMU
You, Mingde (M.S.), Chair (Co-Chaired with Dr. İnci Güneralp), graduated 08/2016, current position/affiliation: National Health and Environmental Effects Research Laboratory (NHEERL), Environmental Protection Agency (EPA), Narragansett, RI
Randall, Jarom, (M.S.), Chair, graduated 08/2015, current position/affiliation: RedCastle Resources, Inc., Salt Lake City, Utah (contractor for U.S. Forest Service)
Saenz, Noe (M.S.), Co-Chair (Co-Chaired with Dr. İnci Güneralp) (in-progress)
Arslan, Damla (M.S.), Chair, graduated 12/2013, current position/affiliation: Turkish Petroleum Corporation (TPAO)
Jennings, Chase (M.S., Non-thesis option), Co-Chair, graduated 08/2014
Chen, Luyao (M.S., Non-thesis option), Co-Chair, graduated 08/2010, current position/affiliation: Product Application Engineer, Trimble Navigation Limited
Kobara, Shinichi (Ph.D.), Co-Chair (Co-Chaired with Dr. Will Heyman), successfully defended 07/30/2009, graduated 12/2009, current position/affiliation: Post-doctoral Fellow, Gulf of Mexico Coastal Ocean Observing System (GCOOS) Dept. of Oceanography, TAMU
Dobreva, Iliyana (M.S.), Co-Chair (Co-Chaired with Dr. Andrew Klein), successfully defended 10/15/2009, graduated 12/2009, current affiliation: TAMU (doctoral student)
1. Texas A&M University

Total number of presentations at Texas A&M University—College Station: 29 (as of 12/2016; 26 of which are not listed), including those in the following departments/units:

TAMU Center for Geospatial Science, Applications and Technology (GEOSAT)
Texas A&M AgriLife
Texas A&M Engineering Experiment Station (TEES)
Geochemical & Environmental Research Group (GERG)
Map and GIS Collection and Services, University Libraries
Department of Ecosystem Science & Management
TAMU Integrative Center for Homeland Security
Department of Forest Science
Department of Geography
Department of Geology and Geophysics
Department of Oceanography
TAMU Sustainable Coastal Margins Program (SCMP)

PRESENTATIONS


2015. You, M.*, Filippi, A. M., Güneralp, İ., and Güneralp, B. Soft classification approaches for analysis of geomorphic and vegetation patterns within a dynamic meandering river floodplain. *2nd Annual Geography Graduate Student Research Symposium*, March 6, College Station, TX. (*Best Poster Presentation Award, 2nd Annual Geography Graduate Student Research Symposium.*)


Anthony Filippi
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2011. Saenz, N.*, Filippi, A. M., Güneralp, İ. DEM-generation for a seamless 2.5-dimensional surface model of channel morphology of river meanders. 9th Annual Pathways Student Research Symposium, Texas A&M University System, Texas A&M University, College Station, TX. (Poster; Abstract published). (Student N. Saenz was awarded the Superior Top 1% among Master's poster presenters award; Saenz was 1 of 2 Master’s students to receive this award, and only 6 total students across all levels—undergraduate, Master’s, and PhD—received this award).


2005. Brannstrom, C., and Filippi, A. M. Remote classification of Cerrado (savanna) and agricultural land covers in Northeastern Brazil's agricultural frontier, *Second Conference of Texas Brazilianists*, University of Texas at Austin, Austin, TX.

2004. Filippi, A. M. Supervised Land Use/Land Cover Classification in Western Bahia, Brazil, *Southwest Division of the Association of American Geographers (SWAAG) and Mid-South Region of the American Society of Photogrammetry and Remote Sensing (ASPRS)*, Stephen F. Austin State University, Nacogdoches, TX.


2001. Filippi, A. M. Hyperspectral airborne monitoring of hazardous waste sites at the Savannah River Site (SRS). University of South Carolina Graduate Student Day, USC, Columbia, SC.


1999. Filippi, A. M. Intensively learning optical oceanography: The bidirectional reflectance distribution function (BRDF) effect on inversion algorithms for IOP estimation. ASLO Aquatic Sciences Meeting, Santa Fe, NM (Poster).


**PUBLISHED MAPS**


**EXTERNAL FUNDING**

**AWARDED GRANTS / RESEARCH PROJECTS**

1999–2003 NASA Graduate Student Researchers Program (GSRP) Fellowship, “Cybernetic group method of data handling (GMDH) statistical learning for hyperspectral remote sensing inverse problems in coastal ocean optics.” $66,000. PI: John R. Jensen (Faculty Research Advisor, University of South Carolina; and NASA John C. Stennis Space Center). Performance period: 08/01/99 to 07/31/2003.


2005 ChevronTexaco Technology Venture, LLC, “Donation of the Texaco Energy and Environmental Multispectral Spectrometer (TEEMS) System to Texas A&M University.” $6,000,000 (estimated cost of sensor system). PI: The Office of the Vice President for Research, TAMU. **Collaborator: Anthony M. Filippi**. Award date: 07/11/05.
2005  Gulf of Mexico Coastal Ocean Observing System (GCOOS), Southeastern Universities Research Association (SURA) Southeastern Coastal Ocean Observing Program (SCOOP), Integrated Ocean Observing System (IOOS), “The SURA Coastal Ocean Observation and Prediction Program (SCOOP).” $15,275. PI: Matthew K. Howard (TAMU), **Consultant:** Anthony M. Filippi. TAMRF Account #: 466061-01001. Performance period: 01/06/05 to 08/31/05.


2010-2013  Texas Water Development Board, “Channel avulsion processes on the Brazos and Navasota Rivers, Texas.” $40,000. PI: İnci Güneralp. **Co-PI:** Anthony M. Filippi. Performance period: 01/06/10 to 08/31/13. Contract No: 0904830968. Students supported: Chen, L. (M.S. student, Geography, as a student hourly worker, Fall 2009 and Spring 2010); Heo, J. (Ph.D. student, Geology, as GRA, Fall 2010).

2011  NASA / Alaska Satellite Facility, University of Alaska Fairbanks, Geophysical Institute, “Biomorphic Coupling of River Meandering and Riverine Landscapes.” $9,250. PI: İnci Güneralp. **Co-PIs:** Anthony M. Filippi, David Cairns. Award date: 03/22/11. ALOS/PALSAR data grant.

2012  IPCC Travel Grant, Subcommittee on Global Change Research (SGCR) of the Committee on Environment and Natural Resources (CENR), National Science and Technology Council (NSTC) / U.S. Global Change Research Program (USGCRP); Joint Office for Science Support (JOSS) of the University Corporation for Atmospheric Research (UCAR). **IPCC Expert Meeting:** Role of Remote Sensing (RS) in Forest and National GHG Emission Inventories, Intergovernmental Panel on Climate Change, Task Force on National Greenhouse Gas Inventories (TFI), Hayama, Japan, 23-25 October, 2012. Amount: $3,326. Award date: 09/16/12.

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*Anthony Filippi*  
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2013-2016* International Center for Agricultural Research in the Dry Areas (ICARDA)/Consultative Group on International Agricultural Research (CGIAR), “Dryland Systems: Integrated Agricultural Production Systems for the Poor and Vulnerable in Dry Areas.” **PI: Anthony M. Filippi**; Co-Pis: Burak Güneralp and İnci Güneralp; Duration: 3 yrs, Performance period: 03/01/13–02/29/16, Texas A&M University, $270,410; Submitted: 09/04/2012. Award date: 12/22/12. *(Due to internal reallocation of ICARDA funds, TAMU funds pending.)*

2013-2014 Ocean Optics, Inc., “Bidirectional Reflectance Distribution Function Effect on Arsenic and Water-Stress Detection in Rice.” Phase I proposal. **PI: Anthony M. Filippi**; Co-PI: Burak Güneralp; Co-I: Lee Tarpley; Performance period: 08/01/13–12/31/14, Texas A&M University, College Station, TX, $10,000; Submitted: 08/31/2012. Awarded: 01/31/2013. Person-months per year: 0.3 month for Filippi.


2014-2015 City of McKinney, Texas, “Aiding development of an Impervious Surface Layer for the City of McKinney, Texas.” Contract. **PI:** Andrew G. Klein (TAMU); **Co-PI:** Anthony M. Filippi (TAMU). Duration: 2 months; Texas A&M University, College Station, TX (TAMU); Amount: $6,537. Graduate student supported: Yi, H. (Ph.D. student, Geography, as a student hourly worker, Fall 2014-Spring 2015).

2017-2019 NASA, Land Cover / Land Use Change (NNH15ZDA001N-LCLUC: Land Cover / Land Use Change), “Impacts of Afforestation on the Provision of Ecosystem Services to rural communities in India.” **PI:** Forrest Fleischman (Texas A&M AgriLife Research); **Institutional PIs:** Burak Güneralp (TAMU); Eric Coleman (Florida State Univ); **Co-Is:** Ashwini Chhatre (Indian School of Business); **Anthony M. Filippi** (TAMU); Harry Fischer (Indian School of Business); Urs Kreuter (TAMU); Pushpendra Rana; Claudia Rodriguez Solorzano (Texas A&M AgriLife Research); Performance period: 01/01/17–12/31/19, Texas A&M Agrilife Research, College Station, TX, Amount: $749,999; Total Amount to TAMU-Geography (to Burak Güneralp (TAMU) and **Anthony M. Filippi** (TAMU)): $133,437. **Funded.** Person-months per year: 0.3 months for Filippi.

**Consultancies Awarded**

2002–2003 **Consultant,** Westinghouse Savannah River Company, Projects at Department of Energy (DOE) Savannah River Site (SRS)/Savannah River National Laboratory (SRNL), Aiken, SC and the EPA Monticello UMTRA/ACAP Waste Site, Monticello, UT.

2000–2001 **Consultant,** DOE Savannah River Site (SRS).
INTERNAL FUNDING

Awarded


2014-2015 College of Geosciences, Texas A&M University, “Students at Sea” Program to be Expanded as Summer Program for Integrated Undergraduate Field Research on Climate Change in the Galápagos.” PI: Douglas Biggs (OCNG, TAMU); Co-PIs: Niall Slowey, Ben Giese (OCNG, TAMU), and Anthony Filippi (GEOG, TAMU). Internal educational grant. High Impact Learning Experiences (HILE): Proposal for Transition Funding – 2015, College of Geosciences, Texas A&M University, College Station, TX. Performance period: Summer 2015; Texas A&M University (TAMU)/ Instituto Oceanográfico de la Armada (INOCAR), Ecuador; Awarded Amount: $9,902. (account: 241588-15022 FY15 HILP-OCNG-STUDENTS AT SEA)

2016 Texas A&M AgriLife Research, Texas A&M University System (TAMUS), “Geospatial technology solutions to support precision agriculture and high through-put phenotyping.” PI: Bishop, M. P. (TAMU); Co-PI: Anthony M. Filippi (TAMU); Performance period: 01/26/16–08/31/16, Texas A&M University System (TAMUS), College Station, TX, Amount: $48,900; Submitted: 12/2015. Awarded: 01/26/16. Person-months per year: 1.2 months for Filippi ($10,000 to Filippi).

2017 Texas A&M AgriLife Research, Texas A&M University System (TAMUS), “Geospatial Technology Solutions for UAS-based Agricultural Research: GEOSAT Year-Three AgriLife Funding Request.” PI: Bishop, M. P. (TAMU); Co-PI: Anthony M. Filippi (TAMU); Performance period: 01/01/17–08/31/17, Texas A&M University System (TAMUS), College Station, TX, Amount: $50,000; Submitted: 11/2016. Awarded: 12/16. Person-months per year: 1 month for Filippi ($8,300 to Filippi).

TEACHING

Courses Taught by Semester

I have taught ten (10) courses. 200-level courses are lower-division undergraduate courses; 300- and 400-level courses are upper-division undergraduate courses; 600-level courses are graduate courses.

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<th>Course Number</th>
<th>Course Name</th>
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Anthony Filippi
Page 18
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*denotes significantly-revised courses
**denotes unofficial enrollment number

Total number of GEOG 485 students: 6 (Spring 2004 (1); Fall 2005 (1); Spring 2006 (2); Spring 2007 (1); Spring 2010 (1) (GEOS 485))
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(Number of students indicated in parentheses)

GEOG 476 is a Writing-Intensive course

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Randall, Jarom, (M.S.), Chair, graduated 08/2015, current position/affiliation: RedCastle Resources, Inc., Salt Lake City, Utah (contractor for U.S. Forest Service)
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Dobreva, Iliyana (M.S.), Co-Chair (Co-Chaired with Dr. Andrew Klein), successfully defended 10/15/2009, graduated 12/2009, current affiliation: TAMU (doctoral student)
International Thesis and Dissertation Committee Membership

Al-Naimi, Noora (Ph.D.), Member, Department of Biological and Environmental Sciences, Qatar University, Doha, Qatar, (Qatar University Doctoral Advisor/Supervisor: Dr. Yousra Soliman, Department of Biological and Environmental Sciences, Qatar University) (in-progress)

Visiting International Graduate Research/Students Supervised


Texas A&M University Undergraduate Research/Students Supervised

Goessler GT, GIST, worked a joint project with Filippi AM (in collaboration with Güneralp B), Object-based land-use/land-cover (LULC) mapping for assessing urban heat island (UHI) effect, Byran/College Station, TX (GEOG 491, Fall 2016; GEOG 491, Spring 2017).

Linden MT, Geography, worked a joint project by Güneralp İ and Filippi AM, Multitemporal GIScience monitoring of river channel change (GEOG 491, Fall 2013).

Wenhardt CE, Environmental Geosciences, worked a joint project by Güneralp İ and Filippi AM, Estimating floodplain leaf area index (LAI) using in-situ digital photography (Spring 2012); worked on a joint project by Güneralp İ and Filippi AM, Riparian vegetation mapping (Fall 2012; GEOG 491, Spring 2013).

Dunn, RA, Geography, worked a joint project by Güneralp İ and Filippi AM, Channel change analysis of the Brazos River, TX (GEOG 491, Spring 2012).

Mauldin CM, Geography, fieldwork for a joint project by Güneralp İ and Filippi AM, on the Trinity River (Summer 2010).

Ward TR, Geography, worked on a joint project by Güneralp İ and Filippi AM, River channel change analysis using remote-sensor imagery (GEOG 491, Summer 2010); also worked jointly with Güneralp İ and Filippi AM on fluvial remote-sensing preprocessing and feature extraction, Fall 2010.

Visiting International Undergraduate Research/Students Supervised


Anthony Filippi
Teaching/Professional Development

Participant, The Faculty Teaching Academy 2008-2009, The Center for Teaching Excellence, Texas A&M University, College Station, TX, USA.


Teaching Awards

2009, Nominated, College Level Association of Former Students teaching award, TAMU

SERVICE

2017–Present  Member, Texas A&M University Supervising Authority for Unmanned Aerial Systems (UASs), College of Geosciences Representative, Texas A&M University, College Station, TX. University-level service. Spring 2017-Present.

2017  Member, Search Committee, Instructional Design Specialist, Distance Education Task Force/Task Force for Dept. of Geography Geographic Information Science & Technology (GIST) and College of Geosciences Online Programs, Department of Geography Representative, College of Geosciences, Texas A&M University, College Station, TX. Department- and College-level service. Spring 2017.

2016–Present  Member, Distance Education Task Force/Task Force for Dept. of Geography Geographic Information Science & Technology (GIST) and College of Geosciences Online Programs, Department of Geography Representative, College of Geosciences, Texas A&M University, College Station, TX. Department- and College-level service. Fall 2016-present.

2016  Member, Search Committee, Director of Distance Education, Department of Geography Representative, College of Geosciences, Texas A&M University, College Station, TX. Department- and College-level service. Fall 2016.


2016–Present  Chair, Department of Geography Awards Committee, College of Geosciences, Texas A&M University, College Station, TX. Department-level service. Fall 2016-present.

2016  Technical Program Committee Member, 2016 11th International Workshop on Spatial and Spatiotemporal Data Mining (SSTDM-16), In Cooperation with IEEE International Conference on Data Mining (IEEE ICDM 2016), 12-15 December 2016, Barcelona, Spain.

2016–2017  Chair, Geosciences Faculty Advisory Committee (GFAC), Department of Geography Representative, College of Geosciences, Texas A&M University, College Station, TX. Elected position, College-level service.

2016-2017  Chair, College of Geosciences Grievance Committee, Department of Geography Representative, College of Geosciences, Texas A&M University, College Station, TX. Elected position, College-level service. Number of cases handled: one (1).

Anthony Filippi
Page 22
2016 Invited Speaker, Texas A&M University Geographical Society, 07 April 2016. Department of Geography, Texas A&M University, College Station, TX. Department-level service.

2016 Search Committee Chair, GIS Specialist position, Center for Geospatial Science, Applications and Technology (GEOSAT), Texas A&M University. Center-level service.

2016 Presenter, TAMU Geosciences Exploration (GEOX) camp, June, 2016. Two (2) presentations: i) Introduction to Geographic Information Science and Technology; and ii) Field spectroscopy (with field/lab activity).


2015 Invited Speaker, Texas A&M University Geographical Society, 04 December 2015. Department of Geography, Texas A&M University, College Station, TX. Department-level service.

2015 Presenter, GEOG 610, GIScience Overview Presentation. 12 October 2015.

2015 Presenter, TAMU Geosciences Exploration (GEOX) camp, June, 2015. Two (2) presentations: i) Introduction to Geographic Information Science and Technology; and ii) Field spectroscopy (with field/lab activity).

2015 Member, New Geoscience Building Working Groups: IT Connectivity, College of Geosciences, Texas A&M University, College Station, TX. College-level service.

2015 Chair, Ad-hoc Tenure and Promotion Committee for Dr. Erik Prout, Department of Geography, College of Geosciences, Texas A&M University, College Station, TX. Department-level service.

2015 Technical Program Committee Member, 2015 10th International Workshop on Spatial and Spatiotemporal Data Mining (SSTDM-15), In Cooperation with IEEE International Conference on Data Mining (IEEE ICDM 2015), 14-17 November 2015, Atlantic City, NJ, USA.


2015–Present Faculty Co-Advisor, Texas A&M Association of Petroleum Surveying and Geomatics, Department of Geography, Texas A&M University.

2015–Present Alternate Faculty Delegate, University Consortium for Geographic Information Science (UCGIS), University-level representative, Texas A&M University, College Station, TX. Service to the Discipline.

2014–2018 Member, Geosciences Faculty Advisory Committee (GFAC), Department of Geography Representative/Member, College of Geosciences, Texas A&M University, College Station, TX. Elected position, College-level service.

2014–Present Member, Communications Committee, GIST Program/Center for Geospatial Science, Applications and Technology (GEOSAT) Center Representative, College of Geosciences, Texas A&M University, College Station, TX. College-level service.

2015–2017 Faculty Senate, College of Geosciences Caucus Leader, Texas A&M University. Elected position, University-level service.

2014  **Chair, Ad-hoc Tenure and Promotion Committee for Dr. İnci Güneralp**, Department of Geography, College of Geosciences, Texas A&M University, College Station, TX. Department-level service.

2014  **Technical Program Committee Member**, 2014 9th International Workshop on Spatial and Spatiotemporal Data Mining (SSTDM-14), In Cooperation with IEEE International Conference on Data Mining (IEEE ICDM 2014), 14 December 2014, Shenzhen, China.

2014  **Search Committee Member**, Geospatial Coordinator position, Center for Geospatial Science, Applications and Technology (GEOSAT), Texas A&M University. Center-level service.


2014  **Presenter, TAMU Geosciences Exploration (GEOX) camp**, 8-13 June, 2014. Two (2) presentations on 13 June, 2014: *i*) Introduction to Geographic Information Science and Technology; and *ii*) Field spectroscopy (with field/lab activity).

2013  **Third-Year Review Ad Hoc Subcommittee for Assistant Professor, Tenure & Promotion Committee**, Department of Geography, Texas A&M University.

2013  **Technical Program Committee Member**, 2013 International Workshop on Spatial and Spatiotemporal Data Mining (SSTDM-13), In Cooperation with IEEE International Conference on Data Mining (IEEE ICDM 2013), 7 December 2013, Dallas, Texas, USA.


2013  **Search Committee Member**, GIS Lab Manager position, Department of Geography, Texas A&M University. Department-level service.

2013  **Faculty Co-Supervisor, 2013 Esri Petroleum GIS Conference**, 7 May, 2013, Houston, TX. Co-supervised/accompanied Geography undergraduate and graduate students to the conference so that they could attend. Department-level service.

2013  **Reviewer**, Association of Former Students/TAMU Graduate Merit Fellowship Applications, Texas A&M University, College Station, TX. University-level service.

2012–2013  **Co-organizer and Presenter**, 2013 Aggieland Saturday Recruitment Activity. Includes GIST presentation/activity. Texas A&M University, College Station, TX.


2012  **Technical Program Committee Member**, 2012 International Workshop on Spatial and Spatiotemporal Data Mining (SSTDM-12), In conjunction with the 2012 IEEE International Conference on Data Mining (IEEE ICDM-2012), Brussels, Belgium.

2012–2014  **Department Colloquia Organization Co-Chair**, Department of Geography, Texas A&M University.

2012–Present  **Member**,  *Geographic Information Science Program/Curriculum Committee*, Department of Geography, Texas A&M University.

2011–2012  **Search Committee Member**, GIScience faculty positions (two positions), Department of Geography, Texas A&M University.

Fall 2010–2014  **Graduate Program Committee Member**, Department of Geography, Texas A&M University.

2010  **Technical Program Committee Member**, 2010 International Workshop on Spatial and Spatiotemporal Data Mining (SSTDM-10), In conjunction with the 2010 IEEE International Conference on Data Mining (IEEE ICDM-2010), Sydney, Australia.

Feb 2010–Present  **College of Geosciences IT Advisory Committee, Faculty Representative**, Department of Geography, Texas A&M University.

2009  **Technical Program Committee Member**, 2009 International Workshop on Spatial and Spatiotemporal Data Mining (SSTDM-09), In cooperation with the 2009 IEEE International Conference on Data Mining (IEEE ICDM-2009), Miami, FL, USA.

Jul 2009–2010  **Search Advisory Committee Member for the Department Head in Geography**, Department of Geography, Texas A&M University, Elected Position.

Mar 2009–2010  **College of Geosciences IT Customer Exchange Group Faculty Representative**, Department of Geography, Texas A&M University.

2008  **Technical Program Committee Member**, 2008 International Workshop on Spatial and Spatiotemporal Data Mining (SSTDM-08), In cooperation with the 2008 IEEE International Conference on Data Mining (IEEE ICDM-2008), Pisa, Italy.


2006  **Program Committee Member**, Geospatial Technologies and Homeland Security Symposium, Texas A&M University Integrative Center for Homeland Security.

2006  **Hurricane Katrina & Rita Aggie Community Relief Efforts**, “Selfless Service to Texas and America,” awarded by Dr. Robert M. Gates, President, Texas A&M University.

2005  **Member**,  *Committee to Study the Analytical Facilities of the College of Geosciences*, Texas A&M University.

2004–2006  **Faculty attendee and van driver**, Department of Geography, Southwest Division of the Association of American Geographers (SWAAG) conference.
2004–Present  
**Co-Chair, Graduate Student Recruitment Committee**, Department of Geography, Texas A&M University.

2004–2008  
**Faculty Advisor, Texas A&M University Geographical Society**, Department of Geography, Texas A&M University.

2004  
**Search Committee Member**, 3D seismology/sea level change position, Department of Geology and Geophysics, Texas A&M University.

2004  
**Referee**, Student Paper Competition, Department of Geography, Texas A&M University.

2003–Present  
**Appointed Member**, Civil SAR Data Users Working Group, Texas A&M University Representative.

2003–2004  
**Search Committee Member**, Full Professor of Geography position (Globalization and Landscape), Department of Geography, Texas A&M University.

2003–2004  
**Website co-coordinator**, Department of Geography, Texas A&M University.

2002–2003  
**Website coordinator**, Department of Geography, Texas A&M University.

2003  
**Contributor to Department of Geography GIS option**, list of recommended electives, Department of Geography, Texas A&M University.

2003  
**Contributor to the Bachelor of Science Degree Program in Spatial Sciences**, College of Agriculture and Life Sciences and College of Geosciences, Texas A&M University.

2003  
**Department of Geography Representative and Presenter**, China-U.S. Roundtable Discussion, “Altered Landscapes and Environmental Responses to Transformation (ALERT),” China-U.S. Relations: Past, Present, and Future, College Station, TX.

2002–2008  
**Advisory Council Member**, Sustainable Coastal Margins Program (SCMP), Texas A&M University.

1995  
**Selected Member**, Kansas State University Community Service Program -International Team, Paraguay, 25 May - 8 August 1995.

### Journal/Proceedings Reviewer*

- Remote Sens. of Environ. (9)
- Environ. Res. Lett. (2)
- Int. J. Remote Sens. (2)
- GIScience & Remote Sens. (6)
- Applied Optics (2)
- Optics Express (1)
- Optics Letters (1)
- Optical Engineering (1)
- EURASIP J. Advances Sig. Proc. (1)
- Southeastern Geog. (1)
- J. Geog. in Higher Education (1)
- Ecological Research (1)
- Geoinformatica (5)
- Nature Communications (1)
- Remote Sensing (5)
- IEEE Geosci. and Remote Sens. Lett. (5)
- ISPRS J. Photogramm. and Remote Sens. (7)
- IEEE J. Selected Topics App. Earth Obs. & Remote Sens. (2)
- Sensors (3)
- J. Atmos. and Oceanic Tech. (1)
- Hydrological Processes (2)
- Marine Geodesy (1)
- Wetlands Ecology and Management (1)
- J. Information Fusion (1)
- Proc. 11th Int. Conf. Geol. Soc. Greece, 2007 (1)
- 2008 Int. Workshop on Spatial and Spatiotemporal Data Mining, Pisa, Italy (1)
- 2009 Int. Workshop on Spatial and Spatiotemporal Data Mining, Miami, FL, USA (1)
- 2010 Int. Workshop on Spatial and Spatiotemporal

Anthony Filippi
Page 26
- Geocarto International (2)
- USGS technical reports (3)
- Applied Mathematics and Computation (1)
- Biogeosciences (2)
- Canadian J. of Forest Research (1)
- The Arab World Geographer (1)
- Arctic, Antarctic, and Alpine Research (1)
- Computers & Geosciences (1)
- Environmental Earth Sciences (1)
- Forests (2)
- Physical Geography (1)
- Sustainability (1)

* Number of manuscripts reviewed in parentheses as of 12/31/2016

**Book/Book Chapter Reviewer**


**Proposal Reviewer**

Proposal Reviewer for NASA; Natural Environmental Research Council (NERC) (United Kingdom); Fonds québécois de la recherche sur la nature et les technologies (Québec (Québec), Canada); Belgian Remote Sensing Research Programme, Belgian Science Policy Office, Research Programme for Earth Observation STEREO III, “Support to Exploitation and Research in Earth Observation”; Undisclosed U.S. Government entity† (†Undisclosed, due to non-disclosure agreement)

**Journal Proposal Reviewer**


**Tenure and Promotion Case/Package Reviewer**

University of Cincinnati, November 2010

**Mid-Tenure and Promotion Review, External Reviewer**

Kansas State University, March 2017

**Judging**

**Judge**, Fall 2011, *9th Annual Pathways Student Research Symposium*, Texas A&M University System, Texas A&M University, College Station, TX.

**Reviewer/Judge**, 2004 TAMU Geography Graduate Student Paper Competition


**Recruiting**

Graduate student-recruitment and professional-outreach presentations and activities:

Anthony Filippi

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Appendix A-61
2005 University of Missouri, Columbia, 29 November-1 December.
2005 University of North Alabama, Auburn University, and Samford University, Alabama, 13-15 March.
2005 Texas A&M University, College Station, 20 January, presented to visiting Mexican academics.
2005 Recruitment of prospective Ph.D. student, Association of Former Students / TAMU Office of Graduate Studies (OGS) Graduate Student Travel Grant. Award amount: $500.
2004 Texas A&M University, College Station, 06 December, presented to public.
2004 Texas A&M University at Kingsville; Corpus Christi; Laredo, 23-25 February.

Undergraduate student-recruitment activities:
2016 Aggieland Saturday, recruitment activity, Department of Geography/College of Geoscience, Texas A&M University
2015 Aggieland Saturday, recruitment activity, Department of Geography/College of Geoscience, Texas A&M University
2014 Undergraduate program recruiting, Department of Geography, Texas A&M University. Transition Academic Programs (TAPS) presentation, recruitment activity
2014 Aggieland Saturday, recruitment activity, Department of Geography/College of Geoscience, Texas A&M University
2013 Aggieland Saturday, recruitment activity, Department of Geography/College of Geoscience, Texas A&M University
2010 Aggieland Saturday, recruitment activity, Department of Geography/College of Geoscience, Texas A&M University

ORGANIZATIONAL MEMBERSHIP

Center for Geospatial Science, Applications and Technology (GEOSAT), Texas A&M University
Fellow, American Geographical Society (AGS)
American Geophysical Union (AGU)
American Society of Limnology and Oceanography (ASLO)
American Society for Photogrammetry and Remote Sensing (ASPRS)
Association of American Geographers (AAG) (Specialty Groups: Remote Sensing, Geographic Information Systems, Spatial Analysis & Modeling, Coastal and Marine, Cartography)
Civil SAR Data Users Working Group, Appointed Member, Texas A&M University Representative
The International Society for Optical Engineering (SPIE)
Phi Beta Kappa Honor Society
Phi Kappa Phi Honor Society
Golden Key National Honor Society
Gamma Theta Upsilon International Geographical Honor Society, Beta Psi Chapter (undergraduate)
CURRENT APPOINTMENTS
Texas A&M University
Assistant Professor of Geography 2012 – Present
Assistant Professor of Computer Science & Engineering 2013 – Present
Director, TAMU GeoInnovation Service Center 2012 – Present

University of Illinois, Urbana-Champaign,
National Center for Supercomputing Applications (NCSA)
CyberGIS Fellow 2014 – 2015

EDUCATION
PhD, Computer Science, University of Southern California 2010
Dissertation Title: Spatial Approaches to Reducing Error and Uncertainty in Geocoded Data
MSc, Computer Science, University of Southern California 2003
Specialization: Multimedia & Creative Technologies, Networks and Databases
BSc, Computer Science, Rutgers University 2002

ACADEMIC EXPERIENCE
Texas A&M University
Assistant Professor of Geography 2012 – Present

Curtin University & Western Australia Department of Health
Visiting Scholar 2012

University of Southern California
Research Assistant Professor of Spatial Science 2010 – 2012
Associate Director, USC GIS Research Laboratory 2010 – 2012
Graduate Research Assistant, USC GIS Research Laboratory 2004 – 2010
Graduate Research Assistant, USC GIS Research Laboratory 2003

INDUSTRY EXPERIENCE
Software Engineer, Fetch Technologies, El Segundo, CA 2003 – 2004
Software Engineering Intern, Citicorp Development Center, Marina Del Rey, CA 2003

PROFESSIONAL CERTIFICATIONS
Internet Technology Certificate, Computer Science, Rutgers University 2002
HONORS AND AWARDS

Professional
CyberGIS Fellow – National Center for Supercomputing Applications 2014
Service Award – 200 Hours, California Science Center 2012
Mentor Fellowship Program Recipient, North American Association of Central Cancer Registries 2011

University
Center for Teaching Excellence, Montague Scholar Award – Texas A&M University 2015
Partners in Learning Award of Excellence – Texas A&M University 2015

Graduate
Finalist, William L. Garrison Award for Best Dissertation in Computational Geography, Association of American Geographers 2010
Esri Development Center Student of the Year, Environmental Sciences Research Institute 2010
Association of Pacific Rim Universities USC Provost Travel Award, University of Southern California 2009
Science, Mathematics and Research for Transformation (SMART) Scholarship for Service Program Fellowship, United States Department of Defense 2007
Second Place, GIS Specialty Group Honors Competition for Student Papers on GIS, Association of American Geographers 2007
University Scholarship Program Recipient, United States Geospatial Intelligence Foundation 2005

STUDENT HONORS AND AWARDS (BASED OFF MY RESEARCH)

Professional
Bowlick F. 2nd place, Earth Sciences, Graduate Oral Presentation. “Graduate and Undergraduate Student Learning in a Project-Based, 'Stacked' Enrollment Introductory GIS Course”, Texas A&M University Student Research Week, College Station, Texas, March, 2014. 2014
Li Z. Finalist. GIS Specialty Group Honors Competition for Student Papers on GIS, Association of American Geographers 2014
PUBLICATIONS

Refereed Journal Articles


Goldberg DW, Cockburn MG. Improving Geocode Accuracy with Candidate Selection Criteria. *Transaction in GIS* 14(S1): 129-146 (2010).


* Co-authorship with students, ** Co-authorship with Research Experiences for Undergraduate students

**Books**


**Book Chapters**


Last updated 05/05/2017


* Co-authorship with students

**Collections Edited**


**Peer Reviewed Conference, Workshop, and Competition Papers**


* Co-authorship with students
Non-Refereed Journal Articles

*Co-authorship with students*

Technical Reports and Working Papers

**Popular Press**

**Other Publications**
http://www.naaccr.org/LinkClick.aspx?fileticket=PF1t2ryCDA4%3d&tabid=161&mid=523.
http://www.naaccr.org/LinkClick.aspx?fileticket=PsCF9a-mWxg%3d&tabid=161&mid=523.

**Conference, Symposium, and Webinar Presentations**


Goldberg DW. *Graduate Programs at Texas A&M University*. Annual Meeting of the Southwest Division of the Association of American Geographers (SWAAG), Albuquerque, NM. October, 2014.

McDonald YJ*, Schwind M*, Goldberg DW, Scarinci I, Castle PE, Cuzick J, Powell A, Robertson M, Wheeler CM. *Landscape of Cervical Cancer Screening, Diagnosis and Pre-Cancerous Treatment Services in New Mexico, USA*. Annual Meeting of the Southwest Division of the Association of American Geographers (SWAAG), Albuquerque, NM. October, 2014.


Goldberg DW. *GIS @ TAMU – HealthGIS Opportunities & Initiatives*. GeoX Texas A&M University, College Station, TX. June, 2014.


Goldberg DW. Sustainable Learning Communities Network (SLCN) - Frameworks for Educational Opportunities. Annual Meeting of the Association of American Geographers, Tampa, FL. April, 2014.


Goldberg DW. GIS @ TAMU – Opportunities & Initiatives. Landgate, Perth, Western Australia. March, 2014.


Li Z*, Goldberg DW. Dynamic Region-Based Attribute Weighting for Probabilistic Geocoding in Los Angeles, CA. Texas A&M Student Research Week, College Station, TX. March, 2014.


Goldberg DW. *Come to Los Angeles for ACM SIGSPATIAL GIS 2012 – It’s better than you think.* 18th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems, Chicago, IL. November, 2011.


Goldberg DW. Toward Quantitative Geocode Accuracy Metrics. The Ninth International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences, Leicester, UK (2010).


Goldberg DW. Extracting Geographic Features from the Internet to Automatically Build Detailed Regional Gazetteers. Electronic Cultural Atlas Initiative, 2nd Annual Cultural Congress, Shanghai, China (2005).

* Co-presenter with student

Webinar & Online Lectures

* Student lead- or co-presenter

Poster Presentations and Demonstrations


Bowlick FJ*, Bednarz SW, Goldberg DW. Investigating GIS learning in graduate and undergraduate students through problem-based projects. Texas A&M GIS Day Student Poster Competition. College Station, TX (2014).


Goldberg DW. Improving Geocode Accuracy with Candidate Selection Criteria. Poster at the University of Southern California Department of Computer Science Research Review, Los Angeles, CA (2010).


(* Student lead- or co-presenter)

**Invited Panels, Lectures, Workshops, and Seminars**


Invited Presentation. GeoSAT Retreat. “HealthGIS @ Texas A&M – Opportunities, Research & Initiatives”. Texas A&M University, College Station, Texas. September, 2014.

Invited Presentation. Geography 201, Texas A&M University. “GIS @ Texas A&M – Opportunities, Research & Initiatives”. College Station, Texas. September, 2014.


Invited Presentation. Department of Psychology, Texas A&M University. “Geocoding Research Opportunities & Challenges in Health & Social Science”. Texas A&M University, College Station, Texas. October, 2013.


Invited Presentation. Interdisciplinary HPV Prevention Center Colloquium Series, University of New Mexico. “Characterizing the Landscape of Health Care Service Accessibility - Implications for Health Outcomes”. University of New Mexico, Albuquerque, New Mexico. May, 2013.


FUNDING ACTIVITY
Extramural Competitive Peer Reviewed Grants and Fellowships

National Institutes of General Medicine, National Institutes of Health, University of Minnesota (Prime). “HealthPop: A Geocoding, Spatial Workflow and Contextual Data Integration Platform”. Subcontract with Michael Oakes, Department of Epidemiology, University of Minnesota, PI of Sub-Award; $1,106,142 (total), $304,805 (Sub-Award). Award# 1R01GM123642-01A1

National Science Foundation. “CRISP Type 2/Collaborative Research: Scalable Decision Model to Achieve Local and Regional Resilience of Interdependent Critical Infrastructure Systems and Communities”. Co-PI with Walter Peacock (PI), Department of Landscape Architecture and Urban Planning, Texas A&M University; $795,010 (total), $70,792 (Sub-Award). Award# 1638346.

National Science Foundation. “REU Site: Cyber-HealthGIS -- Research Experiences at the Intersection of Cyber Infrastructure, GIScience, Computer Science, and Health”. PI; $344,674.

National Cancer Institute, National Institutes of Health, University of Colorado, Denver (Prime). “Innovative solutions to spatial uncertainty in geocoding”. Subcontract with Myles Cockburn (PI), Department of Epidemiology, University of Southern California; PI of Sub-Award. $275,000 (total), $96,000 (Sub-Award). Award# 1R01CA195218-01.

National Institutes of Health. “Physical Activity Impacts of a Planned Activity-Friendly Community: The What, Where, When and Why of Environmental Approaches to Obesity Prevention”. Co-Investigator with Xuemei Zhu (PI), Department of Architecture, Texas A&M University; $2,273,176 (total), $137,879 (Sub-Award). Award# 1R01CA197761-01.

Esri. “Teachers Training Texas Teachers GIS (T23G) Workshop”. Co-PI with Andrew Klein (Texas A&M University); $5,000.


National Cancer Institute, University of New Mexico (Prime). “New Mexico HPV Outcomes, Practice Effectiveness and Surveillance (NM-HOPES)”. Co-Investigator with Cosette Wheeler (PI), Department of Pathology, University of New Mexico; PI of Sub-Award. $1,123,772 (total), $227,485 (Sub-Award). Contract# 1U54CA164336-01.

National Cancer Institute. “Enhancing the utility of geocoding accuracy assessments: Understanding, Analyzing, and Utilizing Spatial Error in the Geocoding Process”. Co-Investigator (PhD Student) with Myles Cockburn (PI), Department of Preventive Medicine, University of Southern California; $160,000. Contract# N01-PC-35139.  


**Extramural Competitive Non-Peer Reviewed Grants**  
(Program Officer Review Only)  
Future Position X (Sweden). “Building the Framework for a Spatial Health Marketplace, Phase 1”. PI; $74,250. (Recommended for funding).  
Future Position X (Sweden). “Automatic Identification of Health-Related Activities, such as Drinking, Smoking, and those Related to Cognitive Decline”. PI; $25,050. (Recommended for funding).  
Department of Defense (Navy), Adventium Labs (Prime). “SBIR: Spatio-Temporal Extension And Analysis Framework (STEAF) – Phase II Option”. Co-Investigator with Martin Michalowski, Adventium Labs (PI). PI of Sub-Award; $40,807 (Sub-Award). Contract # N68936-12-C-0022.  
Department of Defense (Navy), Adventium Labs (Prime). “SBIR: Spatio-Temporal Extension And Analysis Framework (STEAF) – Phase II”. Co-Investigator with Martin Michalowski, Adventium Labs (PI). PI of Sub-Award; $197,905 (Sub-Award). Contract # N68936-12-C-0022.  
Department of Defense (Navy), Adventium Labs (Prime). “SBIR: Spatio-Temporal Extension And Analysis Framework (STEAF) – Phase I Option”. Co-Investigator with Martin Michalowski, Adventium Labs (PI). PI of Sub-Award; $14,999 (Sub-Award). Contract # N68936-12-C-0022.  
Department of Defense (Navy), Adventium Labs (Prime). “SBIR: Spatio-Temporal Extension And Analysis Framework (STEAF)”. Co-Investigator with Martin Michalowski, Adventium Labs (PI). PI of Sub-Award; $17,995 (Sub-Award). Contract # N68936-12-C-0022.  

**Extramural Non-Competitive Sole-Source Contracts**  
(Excluding Service Center Contracts)  
University of New Mexico. “Cervical Cancer Health Disparities and HPV Health Services Pipeline Failures”. PI; $22,115. 2015 – 2015


Casey Family Programs Foundation. “A Spatial Analysis and Optimization of Los Angeles County Department of Child and Family Services Agency Funding”. PI; $21,552. 2011 – 2012

**Intramural Grants**

Information Technology, Texas A&M University. “TAMU Fiber Mapping”. PI with Andrew Klein (Co-PI), Department of Geography, Texas A&M University; $125,872 (total), $0 (Goldberg). 2014 – 2017

Engineering Seed Grant, Texas A&M University. “The Texas A&M University Center for Healthy Active Living (TAMU-CHAL)”. Co-PI with Tracy Hammond (PI), Department of Computer Science & Engineering, Texas A&M University; $100,000 (total), $7,741 (Goldberg). 2014 – 2015

One Health Initiative, Texas A&M University. “A multidisciplinary epidemiological approach to mitigate the human and animal health burden of Chagas disease across a transnational gradient”. Co-PI with Sarah Hamer, Department of Veterinary Medicine, Texas A&M University (PI); $50,000 (total), $3,500 (Goldberg). 2014 – 2015

One Health Initiative, Texas A&M University. “Just Beam It! Transformative Impacts on One-Health using Electron Beam as a Platform Technology”. Co-PI with Suresh Pillai, Department of Nutrition and Food Science (PI); $50,000 (total), $0 (Goldberg). 2014 – 2015


Developing Core Curriculum Courses Enhanced with Technology Program, Texas A&M University. “Geographic Information Science & Technology (GIST) for Introductory Human Geography Core Courses”. Co-PI with Wendy Jepson (PI), Department of Geography, Texas A&M University; $75,000 (total), $0 (Goldberg). 2013 – 2014

Southern California Environmental Health Sciences Center Pilot Project Program, University of Southern California. “Traffic-Related Air Pollution Exposure Assessment with Spatially-Relevant Location Accuracy Metrics”. PI; $24,985. 2011 – 2012

Advancing Scholarship in the Humanities and Social Sciences Provost Research Fund, University of Southern California. “GeoTargeting Social Services – A Platform for Leveraging Spatial Analysis to Optimize the Efficacy of Social Service Planning and Delivery”. PI; $24,985. 2011 – 2012
<table>
<thead>
<tr>
<th>Contract Description</th>
<th>Start Year</th>
<th>End Year</th>
</tr>
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<tbody>
<tr>
<td><strong>Negotiated Non-Competitive Sole-Source Service Center Contracts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North American Association of Central Cancer Registries (Prime) and National Cancer Institute. “NAACCR Open Access Geocoder”. PI of Sub-Award; $51,900 (Sub-Award).</td>
<td>2016 – 2017</td>
<td></td>
</tr>
<tr>
<td>DISH Network LLC. “Provision of Batch Geocoding Services”. PI; $14,000.</td>
<td>2014 – 2015</td>
<td></td>
</tr>
<tr>
<td>Union Bank of California, N.A. “Provision of Batch Geocoding Services”. PI; $23,000.</td>
<td>2010 – 2011</td>
<td></td>
</tr>
<tr>
<td>California Cancer Registry. “Provision of Batch and Manual Geocoding Services”. Co-Investigator with John Wilson (PI), Department of Geography, University of Southern California; $20,000.</td>
<td>2009 – 2010</td>
<td></td>
</tr>
</tbody>
</table>

Northrop Grumman (Prime) and Centers for Disease Control and Prevention. “Development and Testing of Geocoding Services for the Division of Cancer Prevention and Control”. Co-Investigator with John Wilson (PI of Sub-Award), Department of Geography, University of Southern California; $60,000 (Sub-Award). 2008 – 2009


**Non-Negotiated Service Center Sales**

(Excluding Negotiated Service Center Contracts)

TAMU GeoInnovation Service Center Revenue. PI; $10,670 Year to date 2016

TAMU GeoInnovation Service Center Revenue. PI; $178,894 2015

TAMU GeoInnovation Service Center Revenue. PI; $125,373 2014

TAMU GeoInnovation Service Center Revenue. PI; $43,966 2013

TAMU GeoInnovation Service Center Revenue. PI; $33,942 2012

USC WebGIS Revenue. PI; $25,918. 2011

USC WebGIS Revenue. PI; $30,116. 2010

USC WebGIS Revenue. PI; $12,751. 2009

**TEACHING**

**Semester Courses**

**Texas A&M University**

Fall 2012

GEOG 390: Principles of Geographic Information Science

GEOG 660: Applications in Geographic Information Science

Spring 2013

GEOG 390: Principles of Geographic Information Science

GEOG 660: Applications in Geographic Information Science

GEOG 665: GIS-Based Spatial Analysis and Modeling

Fall 2013

Last updated 05/05/2017
GEOG 489: Special Topics in GIS Programming
GEOG 689: Special Topics in GIS Application Development (Stacked with 489)
GEOG 660: Applications in Geographic Information Science

Spring 2014
GEOG 489: Special Topics in WebGIS
GEOG 689: Special Topics in CyberGIS (Stacked with 489)
GEOG 476: GIS Practicum

Fall 2014
GEOG 392: GIS Programming
GEOG 689: Special Topics in GIS Application Development (Stacked with 392)
GEOG 689: Special Topics in Spatial Databases

Spring 2015
GEOG 478: WebGIS
GEOG 689: Special Topics in WebGIS (Stacked with 478)
GEOG 476: GIS Practicum

Fall 2016
GEOG 392: GIS Programming
GEOG 676: GIS Programming (Stacked with 392)
GEOG 391: Spatial Databases
GEOG 659: Spatial Databases (Stacked with 391)

Spring 2017
GEOG 478: WebGIS
GEOG 678: WebGIS (Stacked with 478)
GEOG 476: GIS Practicum

University of Southern California

Spring 2011
GEOG 586: GIS Customization and Programming

Summer 2011
GEOG 582: Spatial Databases

Spring 2012
GEOG 586: GIS Customization and Programming

Short Courses and Workshops

Geocoding Operations Short Course. Half day workshop at the Annual Meeting of the North American Association of Central Cancer Registries, Charlotte, NC (Co-Instructor with Kevin Henry and Recinda Sherman) 2015

Introduction to Javascript & Web Mapping. Half-day workshop during the Texas A&M University GIS Day, College Station, TX 2014

Last updated 05/05/2017
**Introduction to Python & ArcPy.** Half-day workshop during the Texas A&M University GIS Day, College Station, TX  2014

**Intro to Advanced GIS.** One day workshop offered for the US Army Reserves 450th CBRN BN, College Station, TX (Co-Instructor with Andrew Klein)  2014

**Introduction to Esri Mobile Data Collection.** One hour workshop during the Texas A&M University GIS Day, College Station, TX (Co-Instructor with Jannel Gonzales*)  2013

**Introduction to ArcServer.** One hour workshop during the Texas A&M University GIS Day, College Station, TX (Co-Instructor with Zhongxia Li*)  2013

**Introduction to Geocoding.** One hour workshop during the Texas A&M University GIS Day, College Station, TX  2013

**Introduction to Python.** One hour workshop during the Texas A&M University GIS Day, College Station, TX  2013

**Applied Geocoding for Cancer Registries.** One day workshop at the Annual Meeting of the North American Association of Central Cancer Registries, Austin, TX (Co-Instructor with Kevin Henry and Recinda Sherman*)  2013

**Hands-On Geocoding for Cancer Registries.** One day workshop at the Annual Meeting of the North American Association of Central Cancer Registries, Portland, OR (Co-Instructor with Kevin Henry and Recinda Sherman*)  2012

**ArcGIS Essentials Short Course.** One and a half day course offered monthly. University of Southern California, Los Angeles, CA (Co-instructor with Maryam Taher)  2010 – 2012

**Geocoding Basics and Beyond: Applied Geocoding for Public Health.** One day workshop at the Centers for Disease Control and Prevention GeoSWG Geography Awareness Week 2011 Workshop, Atlanta, GA (Co-Instructor with Kevin Henry and Recinda Sherman*)  2011

**Geocoding Basics and Beyond: Applied Geocoding for Cancer Registries.** One day workshop at the Annual Meeting of the North American Association of Central Cancer Registries, Louisville, KY (Co-Instructor with Kevin Henry and Recinda Sherman*)  2011

**Geocoding Best Practices Document Phase I: Development of an Annotated Outline.** One-day workshop offered at the North American Association of Central Cancer Registries Annual Meeting, Regina, Canada (Workshop Facilitator)  2006

* Co-instructor with student

**ACADEMIC ADVISEES**

**Doctoral Students**

Xiao Li, Texas A&M University, Doctoral Candidate in Geography. Committee Chair.  2015 – Present

Last updated 05/05/2017
Kirana Pandian. Texas A&M University, Doctoral Candidate in Geography. Committee Chair. 2015 – Present
Kate Willyard. Texas A&M University, Doctoral Candidate in Sociology. Committee Member. 2015 – Present
Gina Lane. Texas A&M University, Doctoral Candidate in Geography. Committee Chair. 2014 – Present
Forrest Bowlick. Texas A&M University, Doctoral Candidate in Geography. Committee Member. 2012 – Present
Yolanda Mcdonald. Texas A&M University, Doctoral Candidate in Geography. Committee Chair. 2012 – Present
Xin Ma. Texas A&M University, Doctoral Candidate Industrial and Systems Engineering. Committee Member. 2012 – 2015
Deborah Vollmer Dahrk. Texas A&M University, Doctoral Candidate Health Promotion & Community Health Sciences. Committee Member. 2012 – 2014

Masters Students
Aqib Bhat. Texas A&M University, Masters of Science in Computer Science & Engineering. Committee Member. 2015 – Present
Siddhartha Kart Copesetty. Texas A&M University, Masters of Science in Computer Science & Engineering. Committee Member. 2015 – Present
Purnendu Kaul. Texas A&M University, Masters of Science in Computer Science & Engineering. Committee Member. 2015 – Present
Larry Powell. Texas A&M University, Masters of Science in Computer Science & Engineering. Committee Member. 2015 – Present
Lauren Simcic. Texas A&M University, Masters of Urban Planning. Committee Member. 2015 – 2016
Monica Parshley. Texas A&M University, Masters of Science in Geography. Committee Chair. 2014 – Present
Robert E. McCharen. Texas A&M University, Masters of Urban Planning. Committee Member. 2015
Andrew Wallick. Texas A&M University, Masters of Urban Planning. Committee Member. 2014 – 2015
Shiqiang Guo. Texas A&M University, Masters of Science in Computer Science & Engineering. Committee Member. 2014 – Present
Sindhuja Venkatesh. Texas A&M University, Masters of Science in Computer Science & Engineering. Committee Member. 2013 – Present
Ashish Agrawal. Texas A&M University, Masters of Science in Computer Science & Engineering. Committee Member. 2013 – Present
Christopher Garza. Texas A&M University, Masters of Science in Ecosystems Science and Management. Committee Member. 2012 – 2014
Christopher Madera. Texas A&M University, Masters of Science Geography. Committee Member. 2012 – 2014
Zhongxia Li. Texas A&M University, Masters of Science in Geography. Committee Chair. 2012 – 2014

Last updated 05/05/2017
Michael Wahl. University of Southern California, Masters of Science in Geographic Information Science and Technology. Committee Member. 2012 – 2012

Matt Davis. University of Southern California, Masters of Science in Geographic Information Science and Technology. Committee Member. 2011 – 2012

Ronald Lehman. University of Southern California, Masters of Science in Geographic Information Science and Technology. Committee Member. 2010 – 2011

Undergraduate Students (Completed/Completing Undergraduate Honors Theses)
Katelyn Goodroe*. Texas A&M University, Bachelor of Science Biomedical Sciences. Committee Member. 2016 – 2017
Payton Baldridge*. Texas A&M University, Bachelor of Science in Geography, GIS Option. Committee Chair. 2013 – 2014
Kelsi Davis*. Texas A&M University, Bachelor of Science in Environmental Geosciences. Committee Chair. 2013 – 2014
Michael Schwind*. Texas A&M University, Bachelor of Science in Geography, GIS Option. Committee Chair. 2013 – 2014

* Students who are pursuing an undergraduate honors thesis

RESEARCH ASSISTANTS AND STUDENT TECHNICIANS EMPLOYED
Doctoral Students
Gina Lane. Texas A&M University, Doctoral Student, Geography. 2017 – Present Graduate Research Assistant.
Andrew Evans. Texas A&M University, Doctoral Student, Geography. 2016 – Present Graduate Research Assistant.
Parveen Chhetri. Texas A&M University, Doctoral Student, Geography. 2016 – Present Graduate Research Assistant.
Yolanda McDonald. Texas A&M University, Doctoral Student, Geography. 2015 – Present Graduate Research Assistant.
Patrick Barrineau. Texas A&M University, Doctoral Student, Geography. 2013 Graduate Student Technician.
Billy Hales. Texas A&M University, Doctoral Student, Geography. 2013 Graduate Student Technician.
Jeremy Johnson. Texas A&M University, Doctoral Candidate, Geography. 2013 Graduate Student Technician.
Manoj Prasad. Texas A&M University, Doctoral Candidate, Computer Science. 2013 Graduate Student Technician.
Laiyin Zhu. Texas A&M University, Doctoral Candidate, Geography. 2013 Graduate Student Technician.

**Masters Students**

Zhongxia Li. Texas A&M University, Masters of Science, Geography. Graduate Research Assistant. 2013 – 2014


Ellen Gass. Texas A&M University, Masters of Science, Geography. Graduate Research Assistant. 2013

Tiffany Hall. Texas A&M University, Masters of Science, Geography. Graduate Student Technician. 2013

Jarom Randall. Texas A&M University, Masters of Science, Geography. Graduate Student Technician. 2013

Deepthi Velisetti. Texas A&M University, Masters of Science, Computer Science. Graduate Student Technician. 2012 – 2013

Vijay Gumudavelly. Texas A&M University, Masters of Science, Computer Science. Graduate Student Technician. 2012 – 2013


**Undergraduate Students**

Leslie Galvan. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2016 – 2017

Christopher Cole. Texas A&M University, Bachelor of Science, Geophysics, Minor in Geographic Information Science & Technology. Undergraduate Student Technician. 2015 – Present

Krishna Hingrajiya. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015 – Present

Curtis Aanerud. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015 – Present

Samuel Orta. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015 – Present

Everett Neucere. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015 – Present

Jacqueline Clay. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015 – Present
Michael Dudley. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015 – Present

Erik Martinez Luna. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015 – Present

Andrew Thompson. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015 – Present

Lucero Marquez. Texas A&M University, Bachelor of Science, Meteorology, Minor in Geographic Information Science & Technology. Undergraduate Student Technician. 2015

Austin Elsik. Texas A&M University, Bachelor of Science, Computer Science & Engineering, Minor in Business Administration. Undergraduate Student Technician. 2015

Ryan Conwell. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015

Geneva Walker. Texas A&M University, Bachelor of Science, Geography. Undergraduate Student Technician. 2015

Zachary Arrington. Texas A&M University, Bachelor of Science, Geographic Information Science & Technology. Undergraduate Student Technician. 2015

Joseph Trujillo. Texas A&M University, Bachelor of Science, Meteorology. Undergraduate Student Technician. 2015

Natalie Glees. Texas A&M University, Bachelor of Arts, History, Minor in Geography. Undergraduate Student Technician. 2015

Aida Guhlin. Texas A&M University, Bachelor of Science, Geography. Undergraduate Student Technician. 2015 – Present

Amanda Lampley. Texas A&M University, Bachelor of Science, Environmental Studies, Minor in Geographic Information Science & Technology. Undergraduate Student Technician. 2014 – Present

Edgar Hernandez. Texas A&M University, Bachelor of Science, Environmental Geosciences. Undergraduate Student Technician. 2013 – Present

Adrienne Donaldson. Texas A&M University, Bachelor of Science, Environmental Studies. Undergraduate Student Technician. 2013 – 2014

Jannel Gonzales. Texas A&M University, Bachelor of Science, Geography (GIS Option). Undergraduate Student Technician. 2013 – 2014

Aaron Harmon. Texas A&M University, Bachelor of Science, Geography. Undergraduate Student Technician. 2013 – 2014

Alec Kelly. Texas A&M University, Bachelor of Science, Geography (GIS Option). Undergraduate Student Technician. 2013 – 2014

Robert Carmody. Texas A&M University, Bachelor of Science, Geography (GIS Option). Undergraduate Student Technician. 2013

Caitlyn Armstrong. Texas A&M University, Bachelor of Science, Environmental Studies. Undergraduate Student Technician. 2013
Rachel Evans. Texas A&M University, Bachelor of Science, Environmental Studies. Undergraduate Student Technician. 2013
Marissa Garza. Texas A&M University, Bachelor of Science, Environmental Geoscience. Undergraduate Student Technician. 2013
Margarita Guerrero. Texas A&M University, Bachelor of Science, Geography (GIS Minor). Undergraduate Student Technician. 2013
Nicholas Kiker. Texas A&M University, Bachelor of Science, Environmental Geoscience. Undergraduate Student Technician. 2013
Morgan Kraft. Texas A&M University, Bachelor of Science, Environmental Geoscience. Undergraduate Student Technician. 2013

Baldridge, Payton L. Texas A&M University, Bachelor of Science, Geography (GIS Option). Undergraduate Student Technician. 2012 – 2014
Michael Schwind (GIS Option). Texas A&M University, Bachelor of Science, Geography. Undergraduate Student Technician. 2012 – 2014
Forrest Chevaillier. Texas A&M University, Bachelor of Science, Environmental Studies. Undergraduate Student Technician. 2012 – 2014
Kelsi Davis. Texas A&M University, Bachelor of Science, Environmental Geosciences. Undergraduate Student Technician. 2012 – 2014
Nicholas Barber. Texas A&M University, Bachelor of Science, Geography. Undergraduate Student Technician. 2012 – 2013
Tracey Auer. University of Southern California, Bachelor of Arts, Economics. Undergraduate Research Assistant. 2010 – 2012

**STUDENT TRAVEL SUPPORTED**

**National**
Zhongxia Li*. Texas A&M University, Master of Science in Geography. Annual Meeting of the Association of American Geographers. Tampa, FL. 2014
Michael Schwind*. Texas A&M University, Bachelor of Science in Geography. Annual Meeting of the Association of American Geographers. Tampa, FL. 2014
Vijay Rajanna*. Texas A&M University, Doctor of Philosophy in Computer Science & Engineering. 22nd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. Dallas, TX. 2014
Yolanda McDonald*. Texas A&M University, Doctor of Philosophy in Geography. Southwest Division of the Association of American Geographers (SWAAG). Albuquerque, NM. 2014
Andrew Evans*. Texas A&M University, Doctor of Philosophy in Geography. Annual Meeting of the University Consortium for Geographic Information Science, Pasadena, CA. 2014
Kelsi Davis*. Texas A&M University, Bachelor of Science in Environmental Geosciences. Esri International Developer Summit, Palm Springs, CA. 2014

Jannel Gonzales*. Texas A&M University, Bachelor of Science in Geography, GIS Option. Esri International Developer Summit, Palm Springs, CA. 2014

Michael Schwind*. Texas A&M University, Bachelor of Science in Geography, GIS Option. Esri International Developer Summit, Palm Springs, CA. 2014

Zhongxia Li*. Texas A&M University, Master of Science in GIS. Esri International Developer Summit, Palm Springs, CA. 2014

Michael Schwind*. Texas A&M University, Bachelor of Science in Geography, GIS Option. Annual Meeting of the Association of American Geographers, Palm Springs, CA. 2014

Zhongxia Li*. Texas A&M University, Masters of Science in GIS. Annual Meeting of the Association of American Geographers, Palm Springs, CA. 2014


Zhongxia Li. Texas A&M University, Master of Science in GIS. Esri International Developer Summit, Palm Springs, CA. 2013

* Student presenter at conference

PROFESSIONAL STAFF EMPLOYED OR SUPPORTED

Research Staff

Aaron Harmon. Bachelor of Science, Geography (GIS Option), Texas A&M University, 2014. Programmer Analyst I, Full time. 2014 – Present


PROFESSIONAL SERVICE

International
University Consortium for Geographic Information Science, Carolyn Merry Mentoring Award, Awards Committee Reviewer. 2017

University Consortium for Geographic Information Science, 2017 Summer School, Awards Committee Reviewer.

Editorial Board, Section Editor – GIS Programming & Development, University Consortium for Geographic Information Science Body of Knowledge. 2016 –
Scientific Committee Member, AAG 2017 Featured Theme on Uncertainty and Context in Geography and GIScience. 2016 – 2017

Program Committee Member, 2016 AAAI Fall Symposium on Expanding the Boundaries of Health Informatics Using AI (HIAI’16). 2016 – 2017

Program Committee Member, CyberGIS Curriculum Workshop for Synthesizing Education Materials 2016. 2015 – 2016

Program Committee Member, GIScience 2016. 2015 – 2016

Program Committee Member, 2015 AAAI Fall Symposium on Expanding the Boundaries of Health Informatics Using AI (HIAI’15). 2015 – 2016

Faculty Instructor, 2015 Teachers Training Texas Teachers GIS Workshop (T23G). College Station, TX. 2015

Program Committee Member, 2014 AAAI Fall Symposium on Expanding the Boundaries of Health Informatics Using AI (HIAI’14). 2014 – 2015


Workshop Co-Chair, Applied Geocoding for Cancer Registries, Annual Meeting of the North American Association of Central Cancer Registries, Austin, TX. 2013

Global Spatial Networks Liaison, University Consortium for Geographic Information Science. 2012 – 2015

Texas A&M University Representative, Willis Research Network 2012 – 2014

Program Committee Member, North American Association of Central Cancer Registries Annual Meeting. Austin, TX. 2012 – 2013


Member, Cooperative Research Center for Spatial Information (CRC-SI) HealthGIS Program. Perth, Western Australia. 2012 – Present

Workshop Co-Chair, Hands-On Geocoding for Cancer Registries, 2012
Annual Meeting of the North American Association of Central Cancer Registries. Portland, OR.

Local Organizing Chair, 20th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems. 2011 – 2012
Redondo Beach, CA.

Member, Board of Directors, University Consortium for Geographic Information Science. 2011 – Present

Student Paper Competition Judge, Geographic Information System Committee, North American Association of Central Cancer Registries. 2011 – 2012


Environmental Science Grand Award Judge, Intel International Science and Engineering Fair, Society for Science and the Public. Los Angeles, CA. 2011

Paper Session Chair – Challenges and Opportunities for Online, Media and Imprecise Textual Geocoding, First International Geospatial Geocoding Conference. Redlands, CA. 2011


Workshop Co-Chair, Geocoding Basics and Beyond: Applied Geocoding for Cancer Registries, Annual Meeting of the North American Association of Central Cancer Registries. Louisville, KY. 2011

Workshop Co-Chair, Geocoding Basics and Beyond: Applied Geocoding for Cancer Registries, Centers for Disease Control and Prevention GeoSWG Geography Awareness Week 2011 Workshop. Atlanta, GA. 2011


Vice Chair, Geographic Information System Committee, North American Association of Central Cancer Registries. 2010 – 2012

University Delegate, University Consortium for Geographic Information Science. 2010 – 2012

Student Paper Competition Judge, Geographic Information System Committee, North American Association of Central Cancer Registries. 2010
Program Committee Member, Knowledge Engineering, Discovery and Dissemination in Health (KEDDHH) Workshop at IEEE International Conference on Bioinformatics & Biomedicine (BIBM-10). 2010

Workshop Reviewer, Addressing Workshop, Urban and Regional Information Systems Association Annual Conference. 2010

Member, Geographic Information System Committee, North American Association of Central Cancer Registries. 2008 – 2013

Associate Editor, ACM Crossroads: The Student Journal of the Association for Computing Machinery, Association for Computational Machinery. 2006 – 2010


National

Member, Board of Directors, Association of American Geographers Cyberinfrastructure Systems and Science Specialty Group. 2014 – Present


Review Panelist, National Science Foundation. Graduate Research Fellowships Program (GRFP), Sociology & Geography Section. 2013 – 2014

Review Panelist, National Science Foundation, Geography & Spatial Sciences Section. 2013 – 2014

Review Panelist, National Institutes of Health, Infectious Disease, Reproductive Health, and Asthma/Pulmonary Conditions (IRAP) Study Section. 2013 – 2014

Member, National Institutes of Health, Early Career Reviewer Program. 2013 – 2014

Vice Chair, Association of American Geographers Geographic Information Systems and Science Specialty Group. 2013


State

Advisory Council Member, Central Texas GIS Users Group (CenTexGIS). 2012 – Present

Advisory Council Member, Texas Cancer Registry. 2012 – 2015
University
TAMU Diversity Accessibility Hackathon, Organizing Committee, Member, Member. Texas A&M University, College Station, TX. 2017
GIS Day 2017 Organizing Committee, Co-Chair. Texas A&M University, College Station, TX. 2017
MS Geosciences Distance Education Task Force, Member, Texas A&M University, College of Geosciences. 2016 – Present
Undergraduate Committee Member, Texas A&M University, Department of Geography. 2016 – Present
Search Committee Member, Texas A&M University, Department of Geography, Human Geography Search (3 faculty). 2016
Search Committee Member, Texas A&M University, College of Geosciences, Distance Education Director. 2016
GIS Day 2016 Organizing Committee, Co-Chair. Texas A&M University, College Station, TX. 2016
Texas A&M Aggieland Saturday Geography/Geosciences Faculty Participant. Texas A&M University, College Station, TX. 2015
GIS Day 2015 Organizing Committee, Co-Chair. Texas A&M University, College Station, TX. 2015
Participant, All GEOG/GIST Majors Meeting, Texas A&M University, College Station, TX. 2015
TAMU Smart Grid Center Member, Texas A&M University, College Station, TX. 2014 – Present
Geoscience IT Committee Representative, Texas A&M University, College Station, TX. 2014 – Present
Undergraduate Committee, Department of Geography, Texas A&M University, College Station, TX. 2014 – Present
Internship Coordinator, Department of Geography, Texas A&M University, College Station, TX. 2014 – Present
Search Committee Member, Department of Geography, Texas A&M University 2014
Search Committee Member, Department of Marine Sciences, Texas A&M University at Galveston 2014
Presenter, GeoX. Texas A&M University, College Station, TX. 2014
GIS Day 2014 Student Paper Competition Judge. Texas A&M University, College Station, TX. 2014
GIS Day 2014 Student Poster Competition Judge. Texas A&M University, College Station, TX. 2014
GIS Day 2014 Organizing Committee, Co-Chair. Texas A&M University, College Station, TX. 2014
First Annual Computer Science & Engineering Graduate Student Association (CSEGSA) New Student Boot Camp Participant. Texas A&M University, College Station, TX. 2014
College of Geosciences Information Technology Hiring Committee. Texas A&M University, College Station, TX. 2014
Texas A&M New Faculty Orientation Panelist. Texas A&M University, College Station, TX. 2014
Search Committee Member, Director of the Texas A&M University Center for Teacher Excellence. 2014
Bishop-Dunne Catholic High School GeoTech Conference Faculty Presenter. Bishop-Dunne Catholic High School, Dallas, TX. 2014
Texas A&M Transition Academic Programs (TAPS) Faculty Presenter. Texas A&M University, College Station, TX. 2014
Texas A&M Aggieland Saturday Geography/Geosciences Faculty Participant. Texas A&M University, College Station, TX. 2014
Texas A&M University Dive Program Volunteer Dive Master. Texas A&M University, College Station, TX. 2013 – 2014
Texas A&M University Geographic Information Science & Technology Center Development Committee. Texas A&M University, College Station, TX. 2013 – 2014
Texas A&M Crowdsourcing for Aggieland Sustainability Faculty Coordinator. Texas A&M University, College Station, TX. 2013
Texas A&M Geology, Geophysics & Geography Academic Career Panelist. Texas A&M University, College Station, TX. 2013
Texas A&M New Faculty Orientation Panelist. Texas A&M University, College Station, TX. 2013
GIS Day 2013 Poster Session Judge. Texas A&M University, College Station, TX. 2013
GIS Day 2013 Organizing Committee, Co-Chair. Texas A&M University, College Station, TX. 2013
College of Geosciences Online Programs Request for Qualification Committee. Texas A&M University, College Station, TX. 2013
Esri Development Center Training Course Coordinator, Migrating to ArcGIS 10.1. College Station, TX. 2013
College of Geosciences Information Technology Advisory Committee. Texas A&M University, College Station, TX. 2013 – Present
Texas A&M GIS User Group Faculty Coordinator. Texas A&M University, College Station, TX. 2013 – Present
Texas A&M Esri ArcGIS Online Campus Coordinator. Texas A&M University, College Station, TX. 2013 – Present
Texas A&M Esri Development Center Coordinator. Texas A&M University, College Station, TX. 2013 – Present
Texas A&M Esri Development Center Student of the Year Competition Organizer. Texas A&M University, College Station, TX. 2013 – Present
Texas A& University Geographic Information Science & Technology Curriculum Committee. Texas A&M University, College Station, TX. 2012 – 2014

College of Geosciences Information Technology Hiring Committee. Texas A&M University, College Station, TX. 2012 – 2013

Texas A&M North American Association of Central Cancer Registries (NAACCR) Membership Application Preparation. Texas A&M University, College Station, TX. 2012 – 2013

Texas A&M Esri Development Center (EDC) Membership Application Preparation. Texas A&M University, College Station, TX. 2012 – 2013

Texas A&M University Consortium for Geographic Information Science (UCGIS) Membership Application Preparation. Texas A&M University, College Station, TX. 2012 – 2013

Department of Geography Human Environment Vision Committee. Texas A&M University, College Station, TX. 2012 – 2013

Department Representative, Freshman Convocation. Texas A&M University, College Station, TX. 2012 – 2012

GIS Day 2012 Organizing Committee, Co-Chair. Texas A&M University, College Station, TX. 2012 – 2012


Instructor, Southern California Earthquake Center Undergraduate Studies in Earthquake Information Technology. University of Southern California, Los Angeles, CA. 2011 – 2011

Curriculum Development, GEOG 582: Spatial Databases. University of Southern California, Los Angeles, CA. 2011


Member, Southern California Environmental Health Sciences Center Career Development Group. University of Southern California, Los Angeles, CA. 2010 – 2012


Instructor, ArcGIS Essentials Short Course. University of Southern California, Los Angeles, CA. 2010 – 2012

Member, STEM Consortium. University of Southern California, Los Angeles, CA. 2010 – 2011

Curriculum Developer, ArcGIS Essentials Short Course. University of Southern California, Los Angeles, CA. 2010

Faculty Evaluation Review Committee. University of Southern California, Los Angeles, CA. 2010


Member, Spatially-Enabled Real-Time Data Capture Working Group. University of Southern California, Los Angeles, CA. 2009
Other Volunteer & Service Activities
Volunteer Diver, California Science Center Aquarium. University of Southern California, Los Angeles, CA. 2011 – 2012

CONFERENCES SPONSORED
International

FIELD TRIPS ORGANIZED & LED
International
GIS Abroad – Curtin University and Western Australia. College Station, Texas. Four Curtin University GIS Undergraduate and Graduate students December. 2014
GIS Abroad – Curtin University and Western Australia. Perth, Western Australia. Four TAMU GIS Undergraduate and Graduate students March. 2014

National
Oil & Gas GIS at ConocoPhillips. Houston, TX. Five TAMU GIS Undergraduate and Graduate students, five Australian graduate, undergraduate, and faculty (Curtin). December. 2014
Esri DevMeetup. Austin, TX. Six TAMU GIS Undergraduate and Graduate students. October. 2013

MANUSCRIPT REVIEWS
Academic Journals
Applied Geography 2012 – Present
American Journal of Epidemiology 2015 – Present
Canadian Geographer 2012 – Present
Cancer 2013 – Present
GeoInformatica 2012 – Present
Geomatica 2012 – Present
International Journal of Health Geographics 2007 – Present
International Journal of Geographic Information Science 2007 – Present
Journal of Geography in Higher Education 2015 – Present
Municipal Engineer 2013 – Present
PLoS ONE 2013 – Present
Transactions in GIS 2006 – Present
Academic Conferences
2014 AAAI Fall Symposium on Expanding the Boundaries of Health Informatics Using AI (HIAI14). 2014
First International Geospatial Geocoding Conference. 2010 – 2011
Knowledge Engineering, Discovery and Dissemination in Health Workshop at IEEE International Conference on Bioinformatics & Biomedicine 2010
17th ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems 2009

BOOK & BOOK PROPOSAL REVIEWS
Academic Presses
Sage Publications 2013 – Present

PROFESSIONAL SOCIETY MEMBERSHIPS
American Association for Artificial Intelligence
American Association for the Advancement of Science
Association of American Geographers
Association for Computing Machinery
Institute of Electrical & Electronics Engineers
North American Association of Central Cancer Registries
University Consortium for Geographic Information Science
Urban and Regional Information Systems Association

SOFTWARE SYSTEMS DEVELOPED
Texas A&M GIS-Based Residential Ambient Pesticide Exposure System (GRAPES).

WEBSITES DEVELOPED & MAINTAINED
Texas A&M CatMapper Website. Available online at http://catmapper.tamu.edu. 2013 – Present
Texas A&M GIS LinkedIn Page. Available online at
Texas A&M GIS Twitter Page. Available online at
https://twitter.com/tamuGIS. 2013 – Present
Texas A&M GIS Facebook Page. Available online at
https://www.facebook.com/GISTAMU. 2013 – Present
Texas A&M GeoServices Facebook Page. Available online at
Texas A&M GeoServices LinkedIn Page. Available online at
Texas A&M GeoServices Twitter Page. Available online at
https://twitter.com/TAMUGeoservices. 2013 – Present
Texas A&M GeoServices Website. Available online at
https://geoservices.tamu.edu. 2012 – Present
Andrew George Klein
Professor & EOG Teaching Professor in Geosciences
Department of Geography
Texas A & M University

Telephone: 979-845-5219    Fax: 979-862-4497
E-mail: klein@geog.tamu.edu
Website: http://geography.tamu.edu//people/faculty/kleinandrew

Education

Cornell University, Ithaca, NY, 1990-1996
   Ph.D. in Department of Geological Sciences, January 1997
   Thesis: Modern and Late Pleistocene Glacial Studies in the Central Andes: applications of satellite remote
   sensing and digital terrain analysis

   B.A. in Geology and Environmental Studies with Geography Core
   Graduated Magna Cum Laude, with highest honors
   Thesis: Spectral Variation in the Heritage Range, Ellsworth Mountains, Antarctica

Professional Experience

Professor, Texas A&M University, Department of Geography, 2004-present. Investigating the
cryosphere using satellite remote sensing and geographic information systems.

Associate Professor, Texas A&M University, Department of Geography, 2004-2015t.

Assistant Professor, Texas A & M University, Department of Geography, 1998-2004.

Visiting Scientist, Universities Space Research Association (USRA), Hydrological Sciences Branch,
snow-cover mapping algorithm for the Moderate Resolution Imaging Spectroradiometer (MODIS)
instrument.

Lecturer, Geography Department, University of Maryland–Baltimore County, Spring 1998.

Graduate Research Assistant, Cornell University, NASA EOS Interdisciplinary Investigation, 1990-
1996. Investigated modern and late Pleistocene glacier and snow distribution in the central Andes and
Bhutan Himalayas for paleoclimate reconstructions

field mapping and pedological analysis of Holocene and Pleistocene river terraces along the Potomac
River, Virginia.
Hydrologist, Minnesota Department of Natural Resources, *Summer 1988-Spring 1989.* Conducted aquifer tests and other groundwater investigations in response to severe drought conditions in Minnesota.

---

**Publications**

Klein, A. Snape, I., Shafer, C. Aislabie, J, Delille, D. De Azevedo Jurelevicius, D. *in review.* Environmental Remediation. *Antarctica Environments Portal.*


**Klein, A.G.** Sweet, S.T., Wade, T.L. and Kennicutt, M.C.I. *in revision.* Spatial patterns of selected metals in the terrestrial environment at McMurdo Station, Antarctica. *Antarctic Science.*


Appendix A-106


*indicates a student first author

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**Antarctic Treaty System Documents**


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**General Readership**


Book Chapters


Edited/Co-edited Volumes


Conference Proceedings


Workshop Reports

Major Reports


**Other Publications**


Educational/Assessment Publications and Reports


Textbook Consultant


Published Maps


Selected Abstracts/Presentations


*Awarded the 2012 Ralph Stockman Tarr Student Paper competition award*


*Awarded first prize in the SWAAG student poster competition*


Appendix A-116

Awarded the best poster in theme


Awarded the David Hewitt Miller Award for best student poster


Awarded the 2008 Ralph Stockman Tarr Student Paper competition award


Appendix A-120


Klein, A.G. 2004. The use of GIS and remote sensing in Antarctic environmental monitoring activities, Presented at the 30th Congress of International Geographical Union, Glasgow, Scotland, August 16-20th


Appendix A-120


Appendix A-122


Invited Presentations


**Klein, A.G.** From the Tropics to the Poles Mapping of Snow and Glaciers from Satellite. *Department of Geological Sciences, University of Texas-San Antonio*. April 9th, 2010.

**Klein, A.G.** Human Impacts on the Local McMurdo Station Environment, *Department of Geological Sciences, University of Texas-San Antonio*. April 9th, 2010.


Klein, A.G. Long-term environmental monitoring at McMurdo Station, Antarctica, studying 50-years of human impact. *Ohio State University Environmental Science Graduate Program Seminar, Ohio State University*, October 20, 2006.


Educational/Outreach Presentations


Building Cool Presentations from Live Online Maps. GeoTech Conference 2015. Bishop Dunne Catholic School, Dallas, TX February 27\textsuperscript{th}, 2015. (with Miriam Olivares)


From Penguins to Pixels: Using Geographic Information Science to Enhance Geographic Education. Keynote presentation at the Geography 2012 Conference, ESC Region VI, Huntsville, TX. February 17\textsuperscript{th}, 2012.


Environmental Monitoring at McMurdo Station, Antarctica. Presented to several hundred middle school students at O. Henry Middle School, Austin, TX on October 19\textsuperscript{th}, 2011.

Monitoring the Effects of Humans in Antarctica, PolarTREC teleconference with Ann Linsley and high schools across the country from McMurdo Station, Antarctica. December 6\textsuperscript{th}, 2007. Audio available online at http://www.polartrec.com/files/AnnLinsley_120607.mp3


Grants - Extramural


Bednarz, S., Bednarz R., Fillipi, A. and **Klein, A.** *Advancing Geospatial Skills in Science and Social Science (AGSSS) - Track 1, GK-12*. National Science Foundation – Division of Graduate Education, 2005-06-01 to 2008-05-30 ($1,047,120)


**Klein, A.G.** and Chang, A.T.C. *Polder Observations of Directional Reflectance and Polarization of Snow and Sea Ice Fields*. CNES (Centre National d'Etudes Spatiales), France. 1999-2003 (satellite data grant)


Contracts


Kennicutt, M.C. II and others. *Long-Term Monitoring of Human Impacts at McMurdo Station, Antarctica – Phase 7*. US. Army Corp of Engineers Cold Regions Research and Engineering Laboratory (CRRL). April 2010- April 2011 ($207,481).
Kennicutt, M.C. II and others. *Long-Term Monitoring of Human Impacts at McMurdo Station, Antarctica – Phase 6*. US. Army Corp of Engineers Cold Regions Research and Engineering Laboratory (CRRL). April 2010- April 2011 ($244,554).


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**Grants - Intramural**


Appendix A-128


Klein, A.G. 1999. Measurement of Glacier Terminus Positions in the Northern Cordillera Real, Bolivia using GPS *TAMU Faculty Mini-Grant* ($1,000).

---

**Workshops**


CEOS/WGCV Land Validation Workshop on Albedo, Boston University, Boston, Mass., October 22-24, 2002.

MODIS Workshop on Land Surface Radiation Budget Variables and Snow and Ice Products, Boston University, Boston, Mass., October 21-22, 2002.


Polar Geospatial Bootcamp, Polar Geospatial Center, University of Minnesota, Minneapolis, MN. August 17-21, 2015.

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**Panels**

Advisory Boards
Member of the Science and Policy Advisory Group (SPAC) for two New Zealand Antarctic research projects focusing on human impacts in the McMurdo Dry Valleys – 2014-present
Courses Taught

Texas A&M University

BUSH 489 Topics in Technical Collection Systems  
*Fall 2003*

GEOG 203 Planet Earth: Introduction to Earth System Science  
*Fall 1998, Fall 2001, Fall 2002, Fall 2003*

GEOG 232 Cartography and Visualization  
*Fall 2015, Fall 2016*

GEOG 332 Thematic Cartography  
*Fall 1998, Spring 1999, Spring 2000, Spring 2002, Spring 2007, Fall 2011, Fall 2012, Fall 2013, Fall 2014*

GEOG 352 GNSS in the Geosciences  
*Spring 2017*

GEOG 361 Remote Sensing for Geosciences  
*Fall 2000, Fall 2007, Fall 2009, Fall 2010, Fall 2011*

GEOG 390 Principals of Geographic Information Systems  

GEOG 405 Galveston Field Trip  

GEOG 476 GIS Practicum  

GEOG 660 Applications in GIS  
*Fall 2000, Fall 2001, Fall 2004, Fall 2005, Fall 2008, Fall 2009, Fall 2014, Fall 2015, Fall 2016*

GEOG 651 Remote Sensing for Geographical Analysis  
*(Fall 2007, Fall 2009, Fall 2010, Fall 2011)*

GEOG 661 Digital Image Processing  

GEOG 665 GIS Based Spatial Analysis and Modeling  
*Spring 2005, Spring 2008*

GEOG 689 Special Topics in Geospatial Analysis  
*Summer 2001 – co-taught*

GEOG 696 Geomorphology and Remote Sensing  
*Spring 2004, Spring 2006, Spring 2010, Fall 2012, Spring 2016*

GEOS 101 An Introduction to the Geosciences.  
GEOS 289 Freshman Seminar - Exploring Antarctica’s Past and Future  
*Fall 2008, Fall 24696009 – co-taught*

GEOS 405 Environmental Geoscience  

Storm Peak, CO co-trip leader 2016, 2017

WSFC 689 Special Topics in Biodiversity – Wildlife and Fisheries Sciences  
*Summer 2003, Summer 2004 – co-taught*

HONORS Seminar - Texas A&M University Honors Program  
*Fall 2004, Spring 2005, Spring 2006*

**University of Maryland - Baltimore County (UMBC)**

Earth System Science  
*Spring 1998*

**Appalachian State University**

Faculty Participant in Field Trip to Bolivia  
*Summer 1999*
Professional Service - Extramural

*Petroleum Users Group (PUG)*
Education Chair, *2016-present*

*The Cryosphere*
Editor, *2007-2015*

*Association of American Geographers*
Webmaster Cryosphere Specialty Group, *2008-present*
Cryosphere Specialty Group Advisory Board, Member, *2007-2009*
Organizer of the R.S. Tarr Student Illustrated Paper Competition, Cryosphere Specialty Group, *2008-2009, 2013*
Co-Organizer of the R.S. Tarr Student Illustrated Paper Competition, Cryosphere Specialty Group, *2005-2007*
Cryosphere Specialty Group Advisory Board, Member, *2001-2002*
Field Trip Leader Southwestern Division of the Association of American Geographers Meeting *2000*

*Eastern Snow Conference*
Webmaster, *2002-present*
Executive Committee Member, *2001-present*
Co-Editor of the Special Eastern and Western Snow Conference issue of *Hydrological Processes*, *2002-2008*
Past President, *2008*
President, *2007*
Vice President and Program Chair, *2006*
Chairman of Student Paper Competition, *2001*

*Textbook Reviews*
Harcourt Publishers
*John Wiley & Sons*
Wiley-Blackwell

*Proposal Review Panel Member*
*NASA* (4 panels)

*Proposal Reviews*
*AAAS*
*Australian Antarctic Science Division*
*NASA*
*NERC (Natural Environment Research Council- UK)*
*NASA Graduate Fellowship Programs*
*National Science Foundation*

*Manuscript Reviews*
*Annals of Glaciology*
*Antarctic Science*
Cold Regions Science and Technology
EARSeL eProceedings 'Remote Sensing of Snow and Glaciers – Important Water Resources of the Future’
Eastern Snow Conference
Geocarta International
Geoscience and Remote Sensing Letters
Global and Planetary Change
Hydrological Processes
Hydrobiologia
IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
IEEE Transactions on Geoscience and Remote Sensing
Journal of Climate
Journal of Geography in Higher Education
Journal of Geophysical Research
Journal of Glaciology
Journal of Selected Topics in Applied Earth Observations and Remote Sensing
Photogrammetric Engineering and Remote Sensing
Quaternary Research
Remote Sensing
Remote Sensing of Environment
Remote Sensing Reviews
Science of the Total Environment
Transactions on Geoscience and Remote Sensing
The Cryosphere
Water Resources Research

Book Chapter Reviews
Earth Science Satellite Remote Sensing, Springer-Verlag and Tsinghua University

Professional Service – Texas A&M University

University
Faculty Senate Executive Committee, 2008-2011, 2012-2014
Faculty Senator, 2003-present
  Faculty Senate Academic Affairs Subcommittee Member
  Faculty Senate Core Curriculum Committee Member
  Faculty Senate Core Curriculum Committee Chair, 2009-2011, 2015-present (co-chair in 2016)
  Faculty Senate Diversity Subcommittee Member
  Faculty Senate Election Subcommittee Member
Associate Provost for Undergraduate Studies Search Committee Member, 2011
Southern Association of Colleges and Schools (SACS) Accreditation Leadership Team, 2011-2012
SACS Quality Enhancement Program Committee Member, 2011-2012
University Curriculum Committee Member, 2009-2010
Honors and Undergraduate Research Advisory Committee Member, 2008-2013, 2015-present
Pricewaterhouse Coopers Comprehensive Administration Review Advisory Committee, 2013-2014
Provost 25 x 25 Subcommittee on QEP Learning Outcomes and Accreditation Progress Member, 2012-2013
College of Geosciences
  Association of Former Students College Awards Committee Chair, 2009
  Faculty Lead, Distance Education Program, 2016-present
  Geosciences Faculty Advisory Committee Member, 2006-2008
  Geosciences Faculty Advisory Committee Chair, 2008-2009
  GERG Working Group Member, 2010-2011
  GERG Directorship Search Committee, 2013
  GERG Program Review Committee, 2014
  Distance Education Faculty Lead, 2016
  Search Chair - Distance Education Director, Fall 2016

Department of Geography
  Undergraduate Director, 2016-present
  Geographic Information Science and Technology Education Lead, 2015-2016
  Assessment Lead
  Geography Undergraduate Advisor
  Environmental Geosciences Advisor
  Spatial Sciences Advisor
  GIS and RS Graduate Certification Program Advisor

Professional Affiliations
  American Association for the Advancement of Science
  American Geophysical Union
  American Society of Photogrammetry and Remote Sensing
  Association of American Geographers
  International Glaciological Society

Graduate Fellowships
  Department of Energy Graduate Fellowship for Global Change, 1991-1995
  NASA Graduate Global Change Fellowship, 1991 (declined)

Honors and Awards
  2004 Recipient of the Texas A&M Association of Former Students College Level Distinguished Achievement Award for Excellence in Teaching
  2003 Recipient of the Texas A&M College of Geoscience Robert C. Runnels Excellence in Advising Award
  2016 Distinguished Achievement Award for Faculty Excellence in Teaching, College of Geosciences
  2016 EOG Teaching Professorship in Geosciences
International Field Work

November-December 2015 – McMurdo Station, Antarctica
April-May 2015 – Palmer Station, Antarctica
April-May 2014 – Palmer Station, Antarctica
November-December 2013 – McMurdo Station, Antarctica
November-December 2012 - McMurdo, Station, Antarctica
August 2012 – Bolivia
November-December 2011 - McMurdo Station, Antarctica
November-December 2010 - McMurdo Station, Antarctica
November-December 2009 - McMurdo Station, Antarctica
November-December 2008 - McMurdo Station, Antarctica
November-December 2007 – McMurdo Station, Antarctica
November-December 2006 – McMurdo Station, Antarctica
November-December 2005 – McMurdo Station, Antarctica
November-December 2004 – McMurdo Station, Antarctica
November-December 2003 – McMurdo Station, Antarctica
November-December 2001 – McMurdo Station, Antarctica
November-December 2000 – McMurdo Station, Antarctica
December 1999-January 2000 – McMurdo Station, Antarctica
July 1999 – Bolivia
April 1996 – Bolivia
August 1994 – Bolivia
June 1993 – Bolivia

Selected National Field Work

February 2017 – NASA SnowEx Campaign

Outreach Activities

Texas Science Olympiad, Texas A&M University, May 4, 2013.
Summer Honors Invitational Program (SHIP), Texas A&M University, June 2009.
Summer Honors Invitational Program (SHIP), Texas A&M University, June 2008.
Summer Honors Invitational Program (SHIP), Texas A&M University, June 2007.
Stephen Hawking’s Science Exhibition, Texas A&M University, March 8, 2003.
Chemistry Fair, Texas A&M University, November 2, 2002.
Texas Science Olympiad, Texas A&M University, April 5 2002
Faculty Advisor, Texas A&M Geographical Society - 2000-2004
Advisor the Brazos Valley Council of Governors on a regional open space initiative - Summer 2000
Press Coverage


Austin teacher goes to the ends of the Earth to show kids science in action. Austin American Statesman, March 24th, 2012.


Teacher’s passion for science, students takes her to Antarctica. Austin American Statesman October 29th, 2011.


## Graduate Students - Current

<table>
<thead>
<tr>
<th>Student</th>
<th>Ph.D/M.S.</th>
<th>Department</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams, Seth</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Austin, Michael</td>
<td>M.S.</td>
<td>Ecosystem Science and Management</td>
<td>Member</td>
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<tr>
<td>Cook, Christopher</td>
<td>Ph.D.</td>
<td>Anthropology (inactive)</td>
<td>Member</td>
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<tr>
<td>Green, Carl</td>
<td>M.S.</td>
<td>Geography</td>
<td>Co-Chair</td>
</tr>
<tr>
<td>Kim, Youngjae</td>
<td>Ph.D.</td>
<td>Urban and Regional Sciences</td>
<td>Member</td>
</tr>
<tr>
<td>Kincaid, Joni</td>
<td>Ph.D.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Kou, Chia-Pang</td>
<td>M.S.</td>
<td>Atmospheric Sciences</td>
<td>Member</td>
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<tr>
<td>Li, Yiran</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Parshley, Monica</td>
<td>M.S.</td>
<td>Geography</td>
<td>Member</td>
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<tr>
<td>Shubhechchha, Thapa</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
</tr>
<tr>
<td>Salgado, Manuel</td>
<td>Ph.D.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Shi, Dawei</td>
<td>Ph.D.</td>
<td>Oceanography</td>
<td>Member</td>
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<tr>
<td>Yang, Ju</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Yi, Hoonchong</td>
<td>Ph.D.</td>
<td>Geography</td>
<td>Member</td>
</tr>
<tr>
<td>Zhang, Shuai</td>
<td>Ph.D.</td>
<td>Civil Engineering</td>
<td>Member</td>
</tr>
<tr>
<td>Zhao, Panshu</td>
<td>Ph.D.</td>
<td>Geology</td>
<td>Member</td>
</tr>
</tbody>
</table>
# Graduate Students - Former

<table>
<thead>
<tr>
<th>Student</th>
<th>Ph.D./M.S.</th>
<th>Department</th>
<th>Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al Busaidi, Saud</td>
<td>M.S.</td>
<td>Oceanography</td>
<td>Member</td>
</tr>
<tr>
<td>Aly, Mohamed</td>
<td>Ph.D.</td>
<td>Geology and Geophysics</td>
<td>Co-Chair</td>
</tr>
<tr>
<td>Arif, Arham</td>
<td>M.S.</td>
<td>Geography</td>
<td>Member</td>
</tr>
<tr>
<td>Barnett, Ann</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Bloxom, Tiffany</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Burns, Gabriel</td>
<td>M.S.</td>
<td>Geography</td>
<td>Member</td>
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<tr>
<td>Chandra, Sameer</td>
<td>M.S.</td>
<td>Geology and Geophysics</td>
<td>Member</td>
</tr>
<tr>
<td>Chi, Zhaohui</td>
<td>Ph.D.</td>
<td>Geography</td>
<td>Chair</td>
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<td>Dobreva, Iliyana</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Dong, Xian</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Dudek, Timothy</td>
<td>M.S.</td>
<td>Geography</td>
<td>Member</td>
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<td>Forest, Timothy</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Frederick, Kaycee</td>
<td>M.S.</td>
<td>Atmospheric Sciences</td>
<td>Member</td>
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<tr>
<td>Glen, Andrew</td>
<td>Ph.D.</td>
<td>Atmospheric Sciences</td>
<td>Member</td>
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<tr>
<td>Guerry, Melyssa</td>
<td>M.S.</td>
<td>Geography</td>
<td>Member</td>
</tr>
<tr>
<td>Hoffpaurir, Richard</td>
<td>M.S., Ph.D.</td>
<td>Civil Engineering</td>
<td>Member</td>
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<tr>
<td>Jennings, Chase</td>
<td>M.S.</td>
<td>Geography</td>
<td>Co-Chair</td>
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<tr>
<td>Johnson, Harold II</td>
<td>M.S.</td>
<td>Geology</td>
<td>Member</td>
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<tr>
<td>Kim, Minsung</td>
<td>Ph.D.</td>
<td>Geography</td>
<td>Member</td>
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<tr>
<td>Kincaid, Joni</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Labude, Brian</td>
<td>M.S.</td>
<td>Geography</td>
<td>Member</td>
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<tr>
<td>Latterman, LaDonna</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Lee, Song-weon</td>
<td>Ph.D.</td>
<td>Civil Engineering</td>
<td>Member/Co-Chair</td>
</tr>
<tr>
<td>Li, Fayu</td>
<td>M.S.</td>
<td>Geography</td>
<td>Member</td>
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<tr>
<td>Maloney, Bridget</td>
<td>M.S.</td>
<td>Wildlife &amp; Fisheries (Galveston)</td>
<td>Member</td>
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<tr>
<td>Martinez, Adriana</td>
<td>M.S.</td>
<td>Geography</td>
<td>Member</td>
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<tr>
<td>Metoyer, Sandra</td>
<td>Ph.D.</td>
<td>Geography</td>
<td>Member</td>
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<tr>
<td>Morgan, Benjamin</td>
<td>M.S.</td>
<td>Oceanography</td>
<td>Member</td>
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<tr>
<td>Morris, Jennifer</td>
<td>M.S.</td>
<td>Geography</td>
<td>Chair</td>
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<tr>
<td>Noor Al Hamad, Mohammad</td>
<td>Ph.D.</td>
<td>Rangeland Ecology and Management</td>
<td>Member</td>
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<tr>
<td>Oda, Katsuhiko,</td>
<td>Ph.D.</td>
<td>Geography</td>
<td>Member</td>
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<tr>
<td>Oguz, Hakan</td>
<td>Ph.D.</td>
<td>Forest Science</td>
<td>Co-Chair</td>
</tr>
</tbody>
</table>
This is most current version of my curriculum vitae and is current and correct as of the date below.

October 24, 2016

Signature

Date
The Department of Geography invites applications for an **Instructional Assistant Professor** in Geographic Information Science and Technology. This is a non-tenure track position supporting our new online professional masters degree. The degree focuses on the use of GIST in the oil and gas industry (http://geosonline.tamu.edu). The successful applicant will have the opportunity to teach both residential and online courses (4 courses per semester).

The Department of Geography (http://geography.tamu.edu) has twenty faculty members with strengths in biogeography, climatology, geomorphology, human geography, human-environment relationships, and Geographic Information Science and Technology (GIST). We are based in the College of Geosciences (http://geosciences.tamu.edu) with the Departments of Atmospheric Sciences, Geology & Geophysics, and Oceanography, and play a major role in the Environmental Programs in Geosciences. Texas A&M University, a land-, sea-, and space-grant university, is located in a metropolitan area with a dynamic and international community of 255,000 people.

**QUALIFICATIONS**

We seek teaching expertise in GIS including web GIS and GIS programming as well as remote sensing. Domain expertise in the oil and gas industry is preferred, but not essential. Demonstrated experience in teaching blended or online classes, as well as face-to-face is desired. Candidates must have a Ph.D. at the time of appointment, or a master’s degree and significant industry experience, and have a strong commitment to excellence in teaching.

**APPLICATION INSTRUCTIONS**

Candidates should submit a letter of application, curriculum vitae, and arrange for three confidential reference letters to be submitted via Interfolio. We will begin reviewing applications on **May 30, 2017**.

This institution is using Interfolio's ByCommittee to conduct this search. Applicants to this position receive a free Dossier account and can send all application materials, including confidential letters of recommendation, free of charge.

[Apply Now]
For help signing up, accessing your account, or submitting your application please check out our [help and support](mailto:help@interfolio.com) section or get in touch via email at help@interfolio.com or phone at (877) 997-8807.

Texas A&M University is an affirmative action/equal opportunity employer committed to excellence through the recruitment and retention of a diverse faculty and student body and compliance with the American with Disabilities Act. The University is dedicated to the goal of building a culturally diverse and pluralistic faculty and staff committed to teaching and working in a multicultural environment. We strongly encourage applications from women, underrepresented ethnic groups, veterans, and persons with disabilities. Texas A&M University also has a policy to address the needs of dual-career partners ([https://advance.tamu.edu/dual-career-program-information/](https://advance.tamu.edu/dual-career-program-information/))
Sara Baber, Ed.D.
979--845-2734
sara.baber@tamu.edu

Education:

Ed.D. Instructional Technology and Distance Education, Nova Southeastern University
Dissertation: Student Perceptions of Streaming Media Effectiveness

M.Ed. Instructional Psychology and Technology, University of Oklahoma

B.S. Administration and Management, Oklahoma State University

Experience:

Director of Online Learning, College of Geosciences
Texas A&M University – College Station, TX 2016 – present

• Manage the design, development, implementation and assessment of online courses and programs offered through the College of Geosciences
• Administers distance education activities for the College of Geosciences, including budget development, fiscal management and policy development
• Oversight for planning, design, development and implementation of distance learning initiatives
• Provide vision and leadership in the development, implementation and operation of online programs, utilizing appropriate standards and best practices
• Ensures compliance with THECB, SACS, Federal and Board of Regents standards for online instruction

Assistant Vice Chancellor for Academic Technology
University of Massachusetts Dartmouth – North Dartmouth, MA 2013 – 2015

• Collaborated with key leaders, faculty and staff to develop a strategic academic IT plan that aligns with institutional goals and objectives
• Directed the expansion and development of UMD online education
• Oversight for planning, design, development and implementation of academic technology initiatives
• Provided vision and leadership in the development, implementation and operation of online programs, utilizing appropriate standards
• Provided leadership through the Chancellor’s Office for academic technology initiatives that included virtual, blended and face-to-face learning environments, including capital building projects

Director of Online Education
University of North Texas Health Science Center – Fort Worth, Texas 2012 – 2013

• Collaborated with key leaders, faculty and staff to develop a strategic plan for online education
• Provided vision and leadership in the development, implementation and operation of online programs, utilizing Quality Matters standards
• Prepared, facilitated and coordinated distance learning training opportunities for faculty
• Directed the enterprise-wide learning management system migration of all online content from Blackboard to the Canvas LMS
• Prepared and delivered online and face to face faculty workshops in distance education
• Ensures compliance with THECB, SACS, Federal and Board of Regents standards for online instruction

Training Specialist III
University of Texas Information Technology – Austin, Texas 2011 – 2012

• Addressed Help Desk Tier II and Tier III instructional technology questions
• Provided training to Help Desk employees
• Track incidents using incident management tracking system and record and monitor status of customer requests in Blackboard and Canvas
• Prepared, facilitated and coordinated distance learning training opportunities for faculty
• Provided compliance data for reporting to THECB, SACSCOC, and SREB

Assistant Director, Faculty Support & Academic Technology
Case Western Reserve University - Cleveland, Ohio 2009 – 2011

• Directed faculty technology support projects that included Web 2.0 learning tools, Blackboard, Moodle, streaming video, lecture capture and online learning
• Advised and assisted faculty with instructional design, learning technologies, research/teaching projects, and emerging academic technologies
• Responsible for all areas of video production, lecture capture/streaming media, and mobile learning applications
• Served as a member of the Academic Technology Advisory Council, identifying and implementing long range technology goals and strategies
• Worked with the academic community to design, implement, support and enhance technology and digital media for teaching and learning

Director, Academic Technologies
University of Houston - Houston, Texas 2002 – 2009

• Directed the activities of Instructional Design Support, Distance Education Support Services, Video and Streaming Media, and Classroom Technologies
• Advised and assisted faculty with instructional design, learning technologies, research/teaching projects, and emerging academic technologies
• Served as liaison with technology vendors and associations, responsible for developing alliances and gaining financial and equipment support for faculty teaching and research efforts
• Preparation and administration of annual operational budgets totaling $2.5 million
• Assisted with planning and implementation of technology integration in campus classrooms and capital building projects
• Lead a team that explored, designed and implemented faculty training in all applications of instructional technology and distance learning support
• Co-Chair, Classroom Technology Task Force  
• Administrative sponsor for modern web operating system, help desk, and enterprise streaming for students, faculty and staff

**Director, Instructional Technology & Distance Learning**  
*Oklahoma State University - Oklahoma City 1997 - 2002*

• Provided instructional design support and training for campus and distance learning delivery  
• Coordination and supervision of all distance learning activities, including cable television, videoconferencing, and WebCT courses  
• Supervised and coordinated four distance learning classrooms, operating over a packet switched, H.323 network  
• Conducted faculty training in needs assessment, curriculum design, and assessment in distance learning  
• Recommended and purchased instructional technology equipment, hardware and software  
• Supervised Audio Visual and Distance Learning Staff  
• Preparation and administration of yearly operational budget

**Instructional Technology Specialist**  
*Oklahoma State University - Oklahoma City 1994 - 1997*

• Design & Develop Interactive Multimedia Projects  
• Teach Faculty Workshops in PowerPoint, HyperStudio, Final Cut  
• Multimedia Toolbook, Graphics, and Web Authoring (HTML)  
• Coordinate the implementation of a Multimedia Development Computer Lab for Faculty

**Adjunct Faculty/Multimedia Computer Lab Coordinator**  
*University of Oklahoma College of Education - Norman Oklahoma 1991 - 1994*

• Taught 6 hours per semester in Instructional Media  
• Assisted Graduate Faculty with Multimedia Development Research Projects  
• Taught 6 hours per semester in Computer Classroom Applications (MS Office, HyperCard, AuthorWare, HTML)  
• Coordinated scheduling, upgrades, and maintenance of a Macintosh Multimedia Development Lab

**Teaching Experience:**

• Oklahoma City University, Department of Communications  
• University of Phoenix, College of Education  
• University of Houston, College of Technology

**Selected Professional Activities and Education:**

• Maryland Online, Certified Online Adjunct Instructor (COAT)  
• Quality Matters  
• Toastmasters Competent Communicator
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• Member, Online Learning Consortium
• ELI 2015 Program Committee Member
• EDUCAUSE Leadership Institute
• EDUCAUSE Southwest Regional Conference Program Committee
• IT Project Management
• Member, MERLOT
• Member, Texas Distance Learning Association
• Member, United States Distance Learning Association

Conference Presentations:

• “Increase Student Satisfaction Through Engaging Online Interaction” Sloan-C Symposium for Emerging Technologies for Online Learning, Las Vegas, 2012
• “Bridging the Islands: Building an Online Community of Learners” Texas Distance Learning Association, Galveston, 2012
• “Adobe Connect: Let’s Be Creative!” Texas Distance Learning Association, Dallas, 2012
• “Streaming Media Delivery with Limited Resources,” EDUCAUSE, Austin, 2005
• “Nomadic Technologies - Pervasive Applications and Resources for the Future,” WCET, San Antonio, 2004
• “Tablet PCs: New Tools for Streaming and Videoconferencing,” Texas Distance Learning Association, Galveston, 2004
• “Jump Starting Your Online Program,” League for Innovation, Innovations Conference, Boston, 2002
• “Distance Learning Applications in Continuing Medical Education,” Oklahoma Alliance for Continuing Medical Education, Oklahoma City, 2001
• “Effective Materials Design for Distance Learning,” League for Innovation, Innovations Conference, Dallas, 1998
• “Institutional Support For Successful Distance Learning,” Association for Applied Interactive Multimedia, Distance Learning Conference, Myrtle Beach, 1998
• “Florence Nightingale Meets The Jetsons: High Tech Nursing Education,” NISOD, Austin, 1997
Curriculum Vitae

LaVonne Maria Grandy

Personal Statement

I am a results-driven instructional designer and developer with over fourteen years of experience working in the field of teaching and learning in higher education. I have developed online courses from inception to deployment, worked as the team leader for various large institutional projects, and have provided consultation and development assistance for both individuals and large groups. I have delivered training to faculty; including workshops, conferences and web-based training sessions. I have designed and developed online training resources and courses for both faculty and staff. I have managed a diverse team of individuals with varying degrees of skills and abilities.

My experiences have led to some remarkable accomplishments including participating in the first Exemplary Online Course project at the University of Texas at San Antonio - leading the institution’s efforts to host a number of exceptional online courses. I also led the initial Hybrid Academy for faculty, which provided faculty development for instructors moving from the classroom to a blended-learning format and created a classroom-sharing plan on a campus desperate for space-saving solutions. At the UT Health Science Center, I designed and delivered several fully online training courses including the Hyperion Accounting System training for the financial office, Canvas Training for Faculty and Student Orientation, and The Texas Pulse Oximetry Training modules for the School of Nursing.

I am currently participating in the development of a fully online Masters Degree in GIST program at Texas A&M University.

Professional Summary

- Committed to life-long learning; continually seeking new knowledge and skills related to cognition, education, and information technology.

- Demonstrated work history characterized by an ability to handle pressure and creatively solve problems, analyzing situations and developing viable solutions and/or alternatives, integrating technology where effective, while maintaining the highest standards.

- Strong communication and interpersonal skills; able to manage and prioritize multiple projects within deadlines, detail oriented, highly organized, and self-motivated; quickly learn extensive product and technical information and able to instruct others.

- Seek and assume responsibility; extensive management and supervisory experience including hiring, training and evaluating.

- Possess the knowledge, skills, and discipline to perform tasks independently from a remote location using a combination of mobile and computer-based communication and collaboration tool.
Education

M.Ed. Adult & Higher Education, University of Texas San Antonio, 2002
B.A.A.S. Interdisciplinary Studies, Texas State San Marcos, 1998
A.A.A.S. Electronic Graphic Communication and Graphic Design, San Antonio College, 1996

Certifications

Applying the Quality Matters Rubric to Online Courses, Quality Matters, 2016
QM Coordinator Training, Quality Matters, 2016
Distance Education Certificate Program, University of West Georgia, 2009

Career at Texas A&M

*Instructional Design Specialist*

Provide pedagogical and technical support to faculty to develop, design, and create online instructional content applying instructional design oversight and active learning principles in the development process. Work with the faculty to design, and create engaging, interactive, and instructionally sound online learning activities for online courses. Utilize advanced software to create course content that is accessible and meets quality matters certification. Promotes and develops active learning and critical thinking strategies for increasing student learning and engagement.

Plans and coordinates with the director of online learning, various department heads, the instructors and subject matter experts to ensure the project are completed on time and on budget.

Works with the instructional technology team and product vendors to provide testing for new instructional technologies and evaluating educational applications.

Career at UT Health Science Center

*Educational Development Specialist*

Under general direction of the department director, I supervised the design, production, and delivery of curricula, training, program improvement, and related education services to faculty to ensure achievement of mandated goals and to meet existing and emerging needs; performed mandated regulatory functions; performed professional work with minimal supervision in monitoring and evaluation of education programs in the Dental, Nursing, Emergency Health Sciences and Medical schools; and other related duties.

Helped develop and conduct teacher in-service training, workshops, and presentations. Helped create, disseminate, and evaluate our professional development program and curriculum products.

Worked on numerous special training projects.

Worked with instructors to develop curriculum for Online learning including lessons, multimedia presentations, online activities and assessments.
Career at UTSA

Lead/Senior Instructional Designer, University of Texas at San Antonio

Collaborated and consulted with faculty on instructional design issues and needs; provided advice on the effective use of web-based resources, multimedia technologies and instructional software systems to improve teaching both online and on-campus.

Served as a project manager, leading colleagues and support staff in the design and production of web pages and online courses.

Oversaw and performed development of curriculum guides for courses and/or program components. Designed and supervised the production of learning resources in a variety of formats including print, graphics, audio, video, and animation technologies to support curriculum offerings.

Led teams and individuals in the design, development and production of electronic delivery methods.

Consulted with individual or groups of faculty on the optimal design of curriculum and instruction.

Instructional Designer, University of Texas at San Antonio

Collaborated with faculty, subject matter experts (SMEs), training coordinators and audiences on instructional design issues and needs. Consulted with individual or groups of faculty, SMEs and training coordinators on optimal design of curriculum and instruction, and effective uses of multimedia.

Developed curriculum guides and assessment tools for courses and/or program components. Designed and supervised production of learning resources in a variety of formats including print, graphics, audio, video, and animation technologies to support curriculum offerings.

Created and managed on-line courses and web pages; developed interactive, web-based sections for courses.

Research technological advances and made recommendations for multimedia software purchase and use.

CMS Associate/Systems Analysis I, University of Texas at San Antonio

Trained faculty, staff, and students on the use of computing hardware and software. Maintained computer workstations and departmental server(s) by troubleshooting and recommending new hardware and software.

Developed and implemented websites; designing web-based material for on-line learning and train-the-trainer modules.

Performed network, system, and domain level administration, installation and support of software, maximizing production time for servers, and perform data backups. Supported the Universities’ web-based course system and shell. Coordinated technical issues with application vendors.
Technical Expertise

- HTML/XML, CSS, JavaScript, SCORM
- Windows 7, MAC OS, Mobile OS (Windows and Apple)
- Adobe Creative Suite, iMovie, LogicPro
- Articulate, SoftChalk, Camtasia Studio, Respondus, Viewlet Builder, Wimba Collaboration Suite
- WebCT, Blackboard, Canvas, Moodle

Courses/Workshops Taught

- Grandy, L. (2016) Canvas Student Orientation, School of Nursing, UTHSCSA
- Grandy, L., Underbrink, S., Jones, B., Fane, J., Martinez-Ramos, Y. and Hanley, S. (2010) Teaching Online in the Hybrid Environment (Downtown and Main Campus Cohorts). Worked with the Instructional Design and Development group and the UTSA Training group to design, develop and deliver Online and Campus-based Workshops.

Sample of Major Non-Academic or Grant Projects

I provided instructional design consultation on the following major projects:

- Texas Pulse Oximetry Project. Grant funded project to provide online training for nurses to detect possible problems involving neonates.
- Canvas training for Faculty. Facilitated UTHSCSA migration for Blackboard to Canvas.
- Using Hyperion Financial Software. UTHSCSA accounting office.
- College 101. Grant sponsored Community Outreach program. Project Director: Bill Angrove
- Online Writing Lab (OWL). Faculty Member: Dr. Anita Leffel
- San Antonio Women’s Educational Development Grant. Community Outreach program. Project Director: Kendall Tew
- Assessment of Proficiency in Spanish (ALPS). Faculty member: Gabrielle Santiago
• Texas Course Redesign Grant Project. Faculty member(s): John Reynolds, Kirsten Gardner
• Cooperating Teachers Orientation. Faculty Member: Ilna Colemere
• New Student Orientation. Project Director: Lisa Alanzo
• Academic Continuity Project. Project Director: Donovan Agans
• Virtual Language Lab. Project Director: Jim Kelim

Recent Professional Papers, Websites and Documents

• Grandy, L. (2009). Moving from the Classroom to the Online Educational Environment: Preparing Faculty to choose - and use - the appropriate online technologies. In-house report for OIT Management


Conference Presentations


• Grandy, L. and Fane, J. (2010). Integrating Technology: Including Blackboard Tools into Revised Courses. Presented at the Provost’s Academy for Critical Thinking

• Miller, M. and Grandy, L. (2009). The Instructional Integration of Online Multimedia Resources. Presentation at Innovations in Online Learning Conference, Austin, Texas


• Grandy, L. (2006). Addressing the Needs of Visually Impaired Students in Online Courses. Innovations in Online Learning Conference, Austin, Texas
Conference Attendance

- Innovations in Online Learning. Yearly 2006-2013
- Accessing Higher Ground: Accessible Media, Web and Technology Conference. Yearly 2008-2010
- TxDLA Yearly 2006-2010
- T-BUG Yearly 2007-2009
- BlackBoard World 2007
- WebCT Conference 2006

Professional Activities/Services

- Co-Chaired Innovations in Online Learning Conference (2011)
- Volunteered at and created the website for the Creating Possibilities: A Showcase of Technology and Disabilities conference (2009)
- WebCT CE6 Accessibility website for Students
- SACS Accreditation Report Committee member
- Hosted and moderated the Online Course Developers & Instructors (OCDI) forum (2009-2010)
- Portrait Photographer for Our Savior Lutheran Church

Affiliations /Memberships

- Online Learning Consortium (OLC)
- International Association of Accessibility Professionals (IAAP)
- The American Society of Training and Development (ASTD)
- Texas Distance Learning Association (TxDLA)
- United States Distance Learning Association (USDLA)
- International Society for Performance Improvement (ISPI)
Senior IT Professional I

Posting Details

Position Information

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Job Close Date

Geographic Location

Budget Type

Is this position restricted by the Patriot Act?

Is this position D.O.T. regulated?

EEO AA Statement

The Texas A&M System is an Equal Opportunity/Affirmative Action/Veterans/Disability Employer committed to diversity.

Position Summary Information

Job Summary

The Senior Information Technology Professional I position is designed to meet the IT needs of a unit where multifaceted expertise is required. This position includes the general responsibilities listed below plus two or more of the specialty areas of systems, service, applications, and or database management and may include any appropriate duties listed in the Information Technology Professional II position description. Routinely provides technical leadership for a unit-level project or operation, which relies on multiple technical fields. Routinely provides technical oversight for the application of and compliance with unit’s technical standards. May coordinate the technical activities of a project team. Completes reports and summaries for management and/or users including, project status reports, problem reports, and progress summaries.

Required Education and Experience

Bachelor’s degree in applicable field or equivalent combination of education and experience. Five years of related experience.

Preferred Education and Experience

Required Licenses, Certifications, or Registrations

None

Preferred Licenses, Certifications, or Registrations

None
Required Special Knowledge, Abilities, and Skills
Must be able to work in a collaborative team environment. Must have strong interpersonal skills. Ability to multi-task and work cooperatively with others. Strong communication skills. Language Skills: Excellent oral and written communications skills.

Preferred Special Knowledge, Abilities, and Skills
• Amazon Web Services and Workspaces – Setup, use and administration
• Cisco WebEx
• Microsoft Server Operation System
• Microsoft Active Directory
• System scripting languages
• Software license server
• Remote support experience
• Spanish or other language skills a plus.
• Learning Management System configuration and support experience

Other Requirements or Other Factors

Preferred Other Requirements or Other Factors

Detailed Job Duties

Duties Performed
Develop, implement, test, support and maintain standardized Windows Server virtual machines on Amazon Web Services and associated offerings. Produce and maintain a scalable implementation of cloud-based, class-specific virtual machines for remote student use.

Duties Performed
Assist faculty and staff in the installation, testing and maintenance of course software on a range of specification-compliant hardware platforms. Determining licensing requirements and restrictions of software used in the distance education program.

Duties Performed
Work with faculty and staff to develop standardized procedures and data for the testing of courseware. Provide support for content production tools. Implement license delivery systems for centrally managed software licenses.

Duties Performed
Provide online support to remote students with issues related to installation of courseware on those students devices. Assist remote students with conducting standardized procedures for testing the installation of courseware.

Duties Performed
Responsible for integrating the CLGE Learning Management System (LMS) with other academic systems.

Duties Performed
Provide technical support to faculty and staff related to the learning management system, distance education tools and platforms.

Duties Performed
Provide input and advice concerning virtual and physical platform specifications and information delivery methods.

Duties Performed
Other duties as required.

Supplemental Questions
Required fields are indicated with an asterisk (*).

1. * Where did you see this position advertised?
   • The Chronicle of Higher Education
   • HigherEd Jobs
   • Workplace Diversity
   • Work in Texas
   • Higher Education Recruitment Consortium (HERC)
   • Job Fair

https://jobpath.tamu.edu/postings/109441/print_preview

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• GettingHired.com
• RecruitMilitary.com
• This Website
• Other

2. If you selected Other, please let us know where you saw the position advertised.
(Open Ended Question)

3. * Do you have excellent interpersonal and communication (oral and written) skills?
   • Yes
   • No

4. * List each operating system with which you have had administrative experience, including but not limited to length and degree of involvement in their administration.
   (Open Ended Question)

5. * Describe your experience with administering directory services (Windows Active Directory, LDAP, IPA, IdM, etc.) including versions, length and degree of involvement in administration and the percent of your effort this required.
   (Open Ended Question)

6. * Describe your experience with software license servers and control systems.
   (Open Ended Question)

7. * Describe your experience with the administration of Learning Management Systems. Include the system name and your role in its administration.
   (Open Ended Question)

8. * Describe your experience with and scope of third party cloud services, include the provider and platforms used.
   (Open Ended Question)

9. * Describe your role and experience in remote end-user desktop support and helpdesk operations.
   (Open Ended Question)

10. * Describe the two most recent IT projects in which you have participated and your role in those.
    (Open Ended Question)

11. * Describe your experience with the design, deployment, management and administration of virtual desktop environments.
    (Open Ended Question)

Documents Needed to Apply

Required Documents

1. Resume
2. Cover Letter

Optional Documents

1. Curriculum Vitae
2. Transcript
3. Other Document 1
4. Other Document 2
5. Other Document 3
Appendix B: THECB Notification, Approvals

TEXAS HIGHER EDUCATION
COORDINATING BOARD
Academic Quality and Workforce
P.O. Box 12788 Austin, Texas 78711 • 1200 East Anderson Lane 78752

April 20, 2017

Karan Watson, Ph.D., P.E.
Provost and Executive Vice President for Academic Affairs
Texas A&M University
1248 TAMU
College Station, Texas 77843-1248

Dear Dr. Watson:

I acknowledge the notification from Texas A&M University of its intention to offer its existing Master of Geoscience (MGSC) with a major in Geoscience (CIP 40.0601.00) degree online.

Approval is given with the understanding that the institution certifies compliance with the criteria in the Principles of Good Practice for Academic Degree and Certificate Programs and Credit Courses Offered Electronically. These standards can be accessed online at www.thecb.state.tx.us.

Sincerely,

Rex C. Peebles

cc: James Hallmark
    Michael K. Young

AQW/abl/19922
Directions: An institution shall use this form to propose an “existing” bachelor’s or master’s degree program they wish to be offered via electronic to individual (online) delivery.

This form must be completed and signed by the university president or chief academic officer.

Upon completion, attach the “Approval Form” and submit it to the A&M System Office of Academic Affairs at AA-AgendaItems@tamu.edu

Information: Contact the A&M System Office of Academic Affairs at 979-458-7421 (Irma Harper)

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**Administrative Information**

1. **Institution:** Texas A&M University

2. **Program to be Offered (Include CIP code):** Master of Geoscience (MGSC) 40.0601.00

3. **Online Program Description** –

The College of Geosciences offers a non-thesis program that leads to the degree of Master of Geoscience (MGSC). The degree is multi-departmental, encompassing all aspects of the geosciences. This advanced degree program is especially appropriate for experienced professionals in geoscience or related fields seeking a professional Masters degree. Self-styled and structured options are available. Suitable audiences include public- and private-sector professionals working in the environmental or energy fields, or active K–12 science teachers. It offers opportunities to study a broad range of environmental, energy and geoscience topics.

The Master of Geoscience (MGSC) degree is an college-wide, non-thesis, 36 credit hour degree requiring contributions to the degree plan from at least two departments within the college. The degree allows each department to offer the Master of Geoscience through a variety of flexible degree plans depending on the disciplinary focus and the primary department of residence for a student.

4. **Administrative Unit** – Oversight of MGSC lies with the College of Geosciences, with oversight of the defined degree plan described above residing primarily within the Department of Geography.

5. **Proposed Implementation Date** – Summer 2017

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

   **Name:** Dr. Andrew Klein
Format for Existing Bachelors or Masters Degree Program Electronic to Individual (Online Delivery) Request

Step One: For each of the following questions, include the requested information:

- What previously approved programs does your university offer, that are closely related to the new program and how are they related?

The Department of Geography offers a series of courses that focus on Geographic Information Science and Technology (GIST), which satisfy the requirements of the MGSC degree. In the past half-century, this new subfield of GIST has emerged, which emphasizes the tools and techniques of spatial analysis. It also encompasses the triad of modern geospatial technologies – Geographic Information Systems (GIS), Global Navigation Satellite Systems (GNSS) and Remote Sensing – that are enabling the current revolution in spatial analysis. Faculty research and teaching in this subfield is vibrant and active in the Texas A&M Geography Department.

Geospatial technologies, particularly GIST, are in demand for many professional career paths. Faculty in the Department have been working with industry professionals to identify the technical skills and workplace competences required of Texas A&M Geography graduates seeking employment as Geospatial Professionals in this industry. There is substantial demand from especially the petroleum industry regionally for these skill sets, and we have seen clear prospective student interest. Given that the demand for programs of this nature is from prospective students who are working professionals in the industry both domestically and internationally, who commonly do not find it practical to attend on campus, we are requesting approval to deliver this program online. This request is to authorize the MGSC as is it currently exists to be offered entirely or majority online, and our intent is to initially offer the defined degree plan constructed from GIST-related courses which satisfy the Masters of Geoscience (MGSC).

This defined degree plan features a capstone project course that has a short face-to-face component to foster collaborative group exercises and simulate more realistic industry conditions and settings. This mirrors the current structure of the on-campus degree in that the MGSC includes a final project, and this would serve in that role. The final examination for the MGSC degree is embedded in this course. The coordinating faculty for the GIST program in Geography will be the chairs of all masters committees in this program, with other program faculty serving as advisory committee members.
• List the programs within your college/department that are already approved for online delivery.
None at this time. The College has many individual online courses, but no full programs in this modality

• Will significant additional equipment or facilities be needed? If yes, explain.
No.

• Will significant additional financial resources be needed? If yes, explain.
Significant resources will be required for startup related to course conversion to online format, but our goal and model is for the program to be self-sustaining through approved and existing fees and tuition once running. The College has these startup resources in-hand, and is proceeding with program development in anticipation of online delivery approval.

• Will a significant number of new courses be required? If yes, explain.
No. At this point we anticipate generating two or three additional courses that will serve both on-campus and online students, but the current program supports the MGSC degree as it stands.

• Will a significant number of new faculty members be required? If yes, explain.
No, other than those instructional faculty that may be hired to teach additional sections of courses as the program grows.

• Will significant additional library/learning resources be needed? If yes, explain.
No.

• What processes do you have in place that secures that a student registered for a distance education course is the same student who completes and receives credit for it? Explain.

We will use a variety of resources already available or available to plug into the existing eCampus/Blackboard system. This includes a variety of online proctoring options which involve active proctoring via webcam for examinations, through less invasive techniques such as inserting personal questions from student information system interspersed in exams. For longer or group assignments we will use Blackboard Collaborate for video assignments, and/or self-recorded presentations for projects. Written projects will utilize the TurnItIn tool within eCampus. Typically the security offered by existing UIN and ID verification (two-factor authentication, etc.) will provide base-level assurance of identity, but for higher-stakes assignments we will pursue appropriate measures as described above.

*Note: SACS requires that programs that are a significant departure from those offered when the institution was last evaluated be reported according to SACS. If the answers to these questions reflect a “significant departure” then SACS reporting is required.

**Step Two:** For each of the following questions, include the requested information:

1. Program Administrative Oversight and Structure:
   • Identify the person and office directly responsible for the overall management of the offering.
This program is administered ultimately by the College of Geosciences, which has oversight of the Master of Geoscience degree. Daily management of this online program teaching is provided by the Department of Geography with business affairs being managed by the College. The College is at this moment undertaking a search for a Director of Distance Learning. Once hired by Spring 2017, that person will be the direct manager of this program, in collaboration with Geography. Until that person starts, and in consultation with the Director after that date, supervision of this program is provided by Dr. Andrew Klein, Dept. of Geography and Dr. Jack Baldauf, Executive Associate Dean in the College of Geosciences.

2. Faculty Resources:

- If the online program will result in additional students, how will faculty resources be provided, that is, hiring additional faculty, reallocating faculty resources from other programs, etc.?

Our plans are scaled with demand as it ramps up. Initially we have no plans to hire additional faculty, but to reassign existing program faculty as part of their in-load teaching. We also have a model for expansion of single-section courses into multi-section courses with graduate section leaders facilitating daily section communications under the direct supervision of the instructor of record who maintains responsibility for all primary teaching duties and student evaluation. This model is similar to existing lecture/laboratory course models and keeps interactivity high between online students and instructional staff while maintaining instructional consistency and quality. For this purpose we will only employ highly qualified doctoral with expertise in this content area. If enrollments continue to grow, we will seek to hire professors of practice in required areas, supported entirely by program funds. We have an approved program fee in place for this degree program that can supply revenue to fund this expansion as needed, which will make any expansion and operation self-supporting.

3. Evaluation:

- How will your institution monitor the quality of the program and student learning outcomes?

All courses will be monitored in real-time by section leaders and instructors of record for student performance outcomes, and interventions will be made in the event of low performance. Otherwise, all large-scale student learning outcomes are monitored by assessment measures already in place and monitored as part of the routine departmental assessment plans. Quality assurance and monitoring is a high priority for the College, so monitoring new online programs is an especially high priority.

- Describe procedures for evaluation of the program and its effectiveness in the first five years of the program, including admission and retention rates, program outcomes assessments, placement of graduates, changes of job market need/demand, ex-student/graduate surveys, or other procedures.

The Director of Distance Learning will oversee the collection of these metrics and reporting of results to program faculty and College management. Placement of graduates is a critical measure that will be done in conjunction with the College and Departmental Advisory Board, who we will also ask to provide input into the outcomes measures and expectations of this
program. These professional partners and employers will help us gauge market demand and evolving workplace needs. Exit surveys will also be employed, as is the case with current on-campus programs, and regular follow up communication with program alumni will be carried out by the Director to monitor career progress and gather evaluation material for feedback into current program structure.

- How would evaluations be carried out?

Evaluation will be carried out primarily by Qualtrics surveys administered by the College, under the direction of the Director of Distance Learning. Interviews of key alumni, purposefully sampled from our survey respondents, will be carried out to gather deeper insight into post-graduation employment readiness. Internal data gathering after each admissions and graduation cycle (a minimum of every year) will be carried out to monitor program student progress and throughput, and all other measures of retention, completion and student success in outplacement.

**Step Three:** Complete, sign and submit with proposal the “Texas Higher Education Coordinating Board Certification Form for Electronically Delivered Programs.”
Texas A&M University
New Certificate, Bachelors, Masters, or Doctoral Program
Undergraduate • Graduate • Professional
• Proposal Checklist •

Program request type: □ Undergraduate   ☑ Graduate   □ First Professional (e.g., DVM, JD, MD, etc.)
Requested by the Department or Unit of: College of Geosciences & Dept. of Geography

Program Type, Level, Designation, Title, Description, Hours
Program Type: □ Certificate Program   ☑ Degree Program
Program Level: □ UG Certificate   □ Grad Certificate   □ Bachelor   ☑ Master   □ Doctoral   □ Professional
Degree Designation (i.e., BS, BA, MA, MS, MAg, MEA, PhD, EdD, etc.) MGS
Title of proposed program: Master of Geoscience
Proposed CIP Code (if known): 40.0601.00

Brief program description (provide a catalog description for undergraduate and graduate certificates):
The Master of Geoscience degree is an undifferentiated college-wide degree which allows each department to offer the Master of Geoscience. Specific, structured options have been developed for energy-related career paths and GIST in that industry.

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

Certificate Programs □ Embedded
Students take coursework that will result in a degree and certificate being earned at the same time. □ Standalone
Non-degree seeking students take coursework to earn a certificate only (no degrees are awarded).

Off-Campus or Distance Delivery
% of Program a student can take off-campus or through Distance Education
☐ 25%
☐ 50%
☐ 80%
☒ 100% Jan 2017 online – already operating on campus

Program Start Date SACSCOC Approval** When Provost needs to inform SACSCOC
☐ Notification Only
☐ Approval Required 6 months before first day of program
☐ Approval Required 6 months before first day of program

**Notification letter arranged through the Vice Provost for Academic Affairs and sent by TAMU President.

Program Delivery Mode

Location

☐ On-campus
☐ Broadcast / TVN
☐ Specific off-campus location***
☒ Distance Education / Internet ☑ In-State ☑ Out-of-State Start Date Jan 2017
☐ Out-of-Country

Will this program be offered with another institution? ☑ Yes ☐ No
If yes, contact the Vice Provost for Academic Affairs for additional reporting requirements.

***Is this an approved SACSCOC location? ☑ Yes ☐ No
If no, a program prospectus must be sent to SACSCOC. Approved locations as of March 2012: TAMU-Galveston, TAMU-Qatar, University Center-The Woodlands, CityCentre-Houston, Dubai and Saudi Arabia.

Program Funding
Has program funding been finalized at the department or college level? ☑ Yes ☐ No
If no, explain or attach budget: See attached approved BOR program fee request

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.

Revised 04.11.2014
Appendix B-163
Submitted by (Contact Person):

Eric Riggs
Name
Associate Dean
Title
emriggs@tamu.edu
Email
979-845-3651
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.

Signature, Department Head or Interdisciplinary Program Chair
David Cairns
Typed or Printed Name

Chair, College Review Committee
Dean of College
Date

Chair, University Curriculum Committee or Graduate Council
Date

Additional Approvals Required: Faculty Senate and President.
CONTENTS

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Vision & Mission .................... 4
Values ................................. 5
Goals & Action Plans ................. 6
  Education
  Research
  Resources
  Advancement

Appendix C-166
This strategic plan goes into effect as the College of Geosciences, founded in 1965, celebrates its 50th anniversary. That milestone has served as an opportunity to reflect on past accomplishments and to create a vision and roadmap for how we will lead research and education in the Geosciences in the future. The science and technology of the Geosciences have never been so central to current national and international dialog. Energy, water, climate, the environment, and questions about resiliency and sustainable practices are front and center in government, the private sector and local communities. With a mission to advance new understandings of Earth’s Systems and apply them to the needs of society and to prepare the next generation of geoscientists to conduct research, to find and develop natural resources, and to measure and respond to environmental change, the College of Geosciences aspires to lead the state and the nation through innovative teaching, research, and engagement programs.

This document provides a high-level plan for how the College of Geosciences will move forward in the next five years. The planning process began in Spring 2014, during which units within the College developed their own strategic plans. After these were finalized in late spring, the Dean’s executive team analyzed each of the unit plans in order to identify common themes and then created an initial draft of goals and action plans to guide College-level decision-making. This draft was then reviewed with the College Executive Committee and with faculty at meetings over the course of the fall semester. Once initial University-level planning was completed in mid-2015, we updated the College plan to align with university priorities. This iteration was then circulated for review by faculty, revised accordingly and approved by the College Executive Committee.

What has emerged from this deliberative process is a suite of goals and action plans arranged around four central themes: education, research, resources and advancement. We will measure our progress through the annual scorecard process led by the provost’s office and by funding agency reviews such as those conducted by NOAA and the NSF for The Texas Sea Grant and IODP, respectively. For academic units, the scorecards establish a variety of key indicators related to teaching and advising, research and scholarship, and engagement and service. The goals and action plans laid out here are designed to promote progress toward the Vision 2020 goal of becoming a top 10 public research university.

Kate C. Miller
Dean, College of Geosciences

Adopted by the College Executive Committee: November 13, 2015

Appendix C-167
VISION

To lead in establishing the geosciences as the defining scientific discipline of the 21st century. The sustainable human society of the future depends more on innovation and application of discovery in the geosciences than on any other discipline. Our field is essential to solving society’s grand challenges – global climate change, air and water quality, and adequate energy and food supplies.

By lead, we mean:

1. Produce graduates of diverse backgrounds who rise to be leaders in private industry, government, and education.

2. Produce interdisciplinary, innovative, technologically advanced research that is widely translated and communicated for the benefit of a global society.

3. Prepare all students for thoughtful, life-long participation in public issues related to science, technology, and society.

MISSION

To advance new understandings of Earth’s Systems and apply them to the needs of society. To prepare the next generation of geoscientists to conduct research, to find and develop natural resources, and to measure and respond to environmental change.
VALUES

As a community of geoscientists we are committed to:

► Being stewards of planet Earth and assuring its sustainability

► Upholding the University’s core values of excellence, integrity, leadership, loyalty, respect, and selfless service

► Ensuring scientific integrity and the highest standards of ethics

► Growing the geoscience workforce through graduates that leave with outstanding technical skills, and who are innovative, strong communicators, life-long learners, and leaders

► Producing applied research that serves the state and nation

► Producing basic research and discoveries about our planet

► Fostering a work environment of respect and celebration of differences built on an understanding that through diversity comes strength and excellence

► Being careful stewards of state, federal, and donor funds
This portion of the document outlines background, motivations, goals and action plans for each of the College's priority areas: Education, Research, Resources, and Advancement.
The College’s role in education spans general education: students seeking introductory knowledge of Geosciences, undergraduate majors, those seeking a graduate professional credential - typically an M.S., those seeking a career in research that requires the Ph.D., as well as informal education of K-12 students and the public at large. A range of introductory course offerings is central to our vision of preparing all students for thoughtful, life-long participation in public issues related to science, technology, and society, especially in an era when an understanding is essential to ensuring that our society remains resilient and prosperous.

As a profession, geoscience is in the midst of a major transition in its workforce, in which the supply of geoscientists is projected to be a third of the projected demand in 8 years time, as projected by the Bureau of Labor Statistics and the American Geosciences Institute. As a national center of education in the Geosciences, Texas A&M plays a critical role in producing future professionals of diverse backgrounds. These Geoscience graduates, must have many skills and habits of mind in common, such as being able to think about the Earth system from an integrated perspective, be experienced at reasoning through the spatial and temporal evolution of complex systems, and having strong communication skills.

The master’s degree has long been the preferred qualification for professional geoscientists outside of research. As science and technology have advanced, the need for master’s level professionals has become even greater, and provides reason for the College to further distinguish its programs in this area. At the same time, Ph.D. graduates must be equipped to succeed as faculty members at high research activity academic institutions and government agencies.

Since, a sustainable and resilient human society of the future depends greatly on innovation and application of discovery in the geosciences, it is imperative that the College work to translate its research and education activities for society and communities, through its faculty and centers, such as the Office of the State Climatologist and the Texas Sea Grant.

The following goals and action plans reflect the background and motivations outlined in the preceding paragraphs. Each goal is numbered. Steps to achieve those goals are bulleted.
<table>
<thead>
<tr>
<th>EDUCATION GOAL</th>
<th>ACTION PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Expand the diversity and number of courses providing high impact learning experiences for undergraduate students and increase student participation</td>
<td>• Set goals and action plans for expanding high impact learning experiences that leverage on existing faculty research, and outreach and engagement as well as large infrastructure and programs (e.g. Sea Grant, IODP, GERG)</td>
</tr>
<tr>
<td>2 Improve recruitment of students into our degree programs, with emphasis on increasing the academic quality and diversity of incoming students</td>
<td>• Expand enrollment in existing and new HILE courses through increased advertisement and linking HILE to retention and incorporating into degree plans</td>
</tr>
<tr>
<td>3 Substantially grow the number of undergraduate students from other colleges who choose courses in the College of Geosciences to fulfill core curriculum requirements or obtain certificates</td>
<td>• Implement new programs to meet college QEP of Commit to Communicate</td>
</tr>
<tr>
<td></td>
<td>• Continuously assess progress in increasing diversity and number of high impact experiences and the effectiveness of those programs</td>
</tr>
<tr>
<td></td>
<td>• Revise recruitment programs to include expanded geographical reach, clear pathways to the Geosciences and partnership with Prospective Student Centers</td>
</tr>
<tr>
<td></td>
<td>• Complete and implement plans for recruitment of transfer students from community colleges and other schools within the Texas A&amp;M University System</td>
</tr>
<tr>
<td></td>
<td>• Improve visibility of the Geosciences to change of major students</td>
</tr>
<tr>
<td></td>
<td>• Prepare and implement plans to enhance student services as a recruiting tool including a freshman bridge and tutoring program</td>
</tr>
<tr>
<td></td>
<td>• Streamline and automate graduate recruitment and admissions to the college</td>
</tr>
<tr>
<td></td>
<td>• Consider college-wide process for graduate admissions to allow students to find the best departmental fit for their interests</td>
</tr>
<tr>
<td></td>
<td>• Assist departments and programs in marketing introductory courses to non-majors</td>
</tr>
<tr>
<td></td>
<td>• Review and modernize curricula and certificate programs targeted at non-majors</td>
</tr>
<tr>
<td></td>
<td>• Develop online versions of existing core curriculum courses to meet demand and compensate for limits on classrooms</td>
</tr>
</tbody>
</table>
## EDUCATION GOAL ACTION PLAN

### 4 Offer new professional masters degree options
- Understand the online education landscape in the geosciences and assess the viability of offering programs
- Implement online programs based on market research and employer needs
- Develop strategic partnerships and explore the viability of on-ground, offsite professional graduate programs
- Enhance the visibility of on-campus professional programs to address market demands

### 5 Enhance existing and explore compelling interdisciplinary degree programs
- Continue to grow undergraduate environmental geosciences and studies degree programs with the employee needs of government, natural resource firms, and environmental consulting firms in mind
- Expand college involvement in the management and growth of existing MARB and WMHS degree programs
- Develop strategic international partnerships like the OUC dual degree program to support strong, emerging research and high-impact learning experiences

### 6 Implement effective degree program assessments that both produce evidence of student achievement of expected learning and other academic outcomes and are used as a basis for improving programs
- Implement a curriculum evaluation and development program that aligns to University and College QEP

### 7 Assure that instructional practices across the college are aligned with latest research in effective practices, including different learning styles related to diversity
- Establish seminar and workshop opportunities on latest research in effective practices
- Establish a core group of faculty who conduct discipline-based educational research within the college by 2020 to drive the focus on research-based, outcomes-based teaching and curricular design
<table>
<thead>
<tr>
<th>EDUCATION GOAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 Improve the retention of students and reduce the time it takes for students to complete their degrees</td>
</tr>
<tr>
<td>ACTION PLAN</td>
</tr>
<tr>
<td>• Continuously monitor students’ time to degree, and implement changes in degree requirements, course availability, milestones for graduate students, etc. as appropriate</td>
</tr>
<tr>
<td>• Continue to implement and monitor current retention programs and enhance as needed through integration with high impact learning experiences</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATION GOAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Ensure that students are acquiring the knowledge, skills and research practices to be competitive and effective in careers and to meet stakeholder expectations</td>
</tr>
<tr>
<td>ACTION PLAN</td>
</tr>
<tr>
<td>• Engage stakeholders from different communities (industries; federal and state agencies; other key employers) through workshops or other mechanisms to gather advice on how to evolve curricula to meet workforce needs</td>
</tr>
<tr>
<td>• Institute programs that bring former students and prospective employers to campus on a regular basis and involve them in classes and students mentoring.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATION GOAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 Build modern teaching facilities</td>
</tr>
<tr>
<td>ACTION PLAN</td>
</tr>
<tr>
<td>• Establish a student-learning center that serves as a hub of a close-knit community of geoscientists</td>
</tr>
<tr>
<td>• Build modern teaching labs, especially to support upper division undergraduate curricula</td>
</tr>
</tbody>
</table>
The College looks to expand its role in research that spans basic understandings of Earth Systems, to discovery and development of natural resources, the nature of environmental change, and human response to those changes that enhance resiliency and sustainability. The college will build on its existing strengths in interdisciplinary collaboration, analysis and modeling of large data sets, and the fact that ours is a global science in a globalized world. Choosing research topics that have impact as measured by citations and interest from the news media are critical to elevating the recognition of our contributions to the science.

The following goals and action plans reflect the background and motivations outlined in the preceding paragraphs. Each goal is numbered. Steps to achieve those goals are bulleted.
## RESEARCH GOAL ACTION PLAN

### 1 Advance research in basic and applied geosciences

- Identify seed funding for high-risk, high-impact research
- Seek endowments for outstanding faculty, and research centers
- Ensure faculty advancement in skills and knowledge through career development

### 2 Elevate the impact of our research, especially that which directly benefits society and enhances economic well-being through improved outreach and engagement

- Develop and implement strategies to increase the number of articles published in highly-cited journals such as Nature, and Science
- Develop and implement strategies to increase the number of faculty nominated for and receiving highly prestigious awards for their research
- Develop and implement strategies to increase the number of invited presentations at national and international meetings
- Develop and implement strategies to increase the number of faculty serving on national and international advisory committees

### 3 Establish major multidisciplinary research initiatives that distinguish the college and university

- Establish the recently created Center for Geospatial Sciences, Applications and Technology to advance geoinformatics efforts across the university
- Successfully implement the SmartGulf initiative to advance our understanding of the natural processes associated with the Gulf of Mexico
- Continue development of the Texas Water Observatory to establish a network of real-time sensors in the State of Texas that integrate ground, surface and atmospheric water models
- Develop a research partnership with industry focused on understanding unconventional hydrocarbon reservoirs
<table>
<thead>
<tr>
<th>RESEARCH GOAL</th>
<th>ACTION PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4  Strengthen the college’s research connectivity</strong></td>
<td>• Integrate IODP Staff Scientists in research and teaching collaborations with college faculty</td>
</tr>
<tr>
<td></td>
<td>• Grow Ocean Sciences research by strengthening collaborations between College Station and TAMUG</td>
</tr>
<tr>
<td></td>
<td>• Contribute to high impact learning programs by increasing opportunities for teaching through research</td>
</tr>
<tr>
<td></td>
<td>• Establish and grow strategic partnerships with other universities, private industry, and governments</td>
</tr>
<tr>
<td></td>
<td>• Grow research relationships with major corporations, and government labs and agencies such as NOAA and NASA</td>
</tr>
<tr>
<td><strong>5  Review the international footprint of the college and identify opportunities for strategic collaborations with institutions that match or complement the college’s strengths in research and education</strong></td>
<td>• Support development of new PI-to-PI international collaborations</td>
</tr>
<tr>
<td></td>
<td>• Support development of unit-specific international partnerships</td>
</tr>
<tr>
<td></td>
<td>• Continue to explore partnerships in Central and South America, including Mexico, in Europe, the middle East, and China</td>
</tr>
<tr>
<td></td>
<td>• Develop MOUs with institutions that match well with a broad spectrum of research and education areas in the college</td>
</tr>
<tr>
<td><strong>6  Modernize and advance the College and University’s research infrastructure</strong></td>
<td>• Renovate O&amp;M/Halbouty Buildings allowing expansion of faculty and research programs</td>
</tr>
<tr>
<td></td>
<td>• Plan for a new building to house the entire college</td>
</tr>
<tr>
<td></td>
<td>• Build an IT infrastructure to support the research-computing environment of the future</td>
</tr>
</tbody>
</table>
Strategic investments in human, fiscal, physical, and information resources together with fostering appropriate and effective internal organizational and decision-making structures are essential to achieving the college’s core mission.

The college seeks to foster a workplace environment that is welcoming, productive, and rewarding for all employees. Key factors in attaining this goal are to emphasize respect for individual differences, providing adequate training in policies, procedures, and software, administering an excellent performance evaluation process as well as developing skills in conflict resolution and teamwork.

The college is highly dependent on state funding and tuition to support its educational activities and on federal funding for its research activities. Acknowledging that these funding sources will likely remain flat or diminish in the future, we must look to grow the portion of our activities that are funded from other sources.

Maintenance, renovation, and planning for new facilities and infrastructure are essential to a productive work environment for the long term. At present, the college has an adequate amount of space, but the quality of that space is generally fair to poor. In the coming years we will need to carefully weigh decisions to renovate against the forward progress of planning for new facilities for the College and the University. The need for new hardware and system support of the college’s information technology enterprise will continue to grow rapidly. We will need to be well positioned to anticipate and respond to this growth.

The following goals and action plans reflect the background and motivations outlined in the preceding paragraphs. Each goal is numbered. Steps to achieve those goals are bulleted. ➤➤➤
<table>
<thead>
<tr>
<th>RESOURCES GOAL</th>
<th>ACTION PLAN</th>
</tr>
</thead>
</table>
| **1** Diversify the fiscal resource base | • Substantially increase success in partnering with foundations and corporations  
• Build and execute a comprehensive fundraising plan in collaboration with the Texas A&M Foundation |
| **2** Sustain a workplace environment that attracts and retains diverse faculty, students and staff of the highest quality | • Regularly measure workplace climate at the survey level. Engage College task force convened specifically to analyze current results and report concerns to the Dean  
• Routinely commission focus group and interview investigations as deemed necessary  
• Take action on findings by crafting effective change strategies and administrative procedures to improve problem areas  
• Address salary equity on a regular basis as budget permits, in the context of data from peer and peer-aspirant institutions |
| **3** Provide robust, targeted career development opportunities for faculty and staff | • Identify needs and provide professional development for faculty and staff to ensure steady career growth and satisfaction  
• Grow leadership skills among faculty and staff through participation in periodic workshops and targeted job assignments  
• Develop a leadership succession plan |
<table>
<thead>
<tr>
<th>RESOURCES GOAL</th>
<th>ACTION PLAN</th>
</tr>
</thead>
</table>
| Maximize institutional effectiveness by improving administrative processes and resource management | • Increase productivity by carefully monitoring available resources and matching them to strategic needs and priorities  
• Develop more regular and effective communications about processes and resources through a variety of mechanisms such as town hall meetings, emails, newsletters, and blogs  
• Identify and eliminate bottlenecks related to process and decision-making  
• Clarify roles and consolidate functions to reduce duplication of effort and costs  
• Formalize expectations for periodic training and career development of employees |
| Effectively balance maintenance and protection of existing infrastructure and investment in new infrastructure | • Plan for a new building that will ideally unite College units under one roof and provide the modern laboratory, teaching, and collaborative spaces within the next five years  
• Prioritize renovations of existing infrastructure in terms of critical needs over the next 5 years, the minimum time frame needed to propose, garner approval, and build a new building  
• Develop and execute a plan for improving management of information technology support and infrastructure, including support for distance learning |
The College of Geosciences has integrated fundraising, alumni relations, and communications and marketing functions into an advancement team to broaden visibility and deepen relationships with key target audiences. Important and diverse audiences for this effort are prospective students, former students, the Texas A&M community, peer institutions, corporations, foundations, government agencies, and the public at large. The advancement effort supports recruitment of top students, publicity for high-impact research findings and public engagement activities, publicity for accomplishments of faculty, students, and staff members, and fundraising.

The following goals and action plans reflect the background and motivations outlined in the preceding paragraphs. Each goal is numbered. Steps to achieve those goals are bulleted.
## ADVANCEMENT GOAL

### 1
Strategically build and maintain a strong on-line presence focused on the different personas of targeted external audiences

**ACTION PLAN**

- Launch and maintain new website with emphasis on external audiences
- Develop and adapt social media strategies to communicate with different target groups using different platforms (e.g., Facebook for momentum strategies and engagement, Instagram and Twitter for younger audiences; LinkedIn for new professionals seeking networking opportunities)
- Publish news stories about student and faculty achievements

### 2
Publish a variety of materials for communication with a range of audiences

**ACTION PLAN**

- Produce monthly electronic newsletters: one directed at internal audiences (i.e., faculty, students and staff of the college), another directed at external audiences
- Produce promotional materials for recruitment of freshmen, transfer students and graduate students
- Produce a variety of informational brochures on departments, centers, and research strengths
- Produce development-specific materials that communicate funding priorities to potential donors
- Publish other, longer, documents such as a quarterly or semi-annual college magazine and/or an annual report
- Review impact of publications and adjust strategy regularly

### 3
Support processes for being responsive to external media requests

**ACTION PLAN**

- Partner with University Marketing and Communications to publicize research and outreach of interest to outside stakeholders
- Partner with University Marketing and Communications, the TAMUS communications office and TAMUG to publicize research and outreach activities of interest to outside stakeholders
- Respond promptly to inquiries from the news media
<table>
<thead>
<tr>
<th>ADVANCEMENT GOAL</th>
<th>ACTION PLAN</th>
</tr>
</thead>
</table>
| 4 Create and execute a plan for raising major gifts to achieve capital campaign goals specific to the college | • Engage college leadership and faculty in development activities  
• Set fundraising priorities for the College and individual units  
• Maintain reliable stewardship processes for acknowledging and thanking donors  
• Maintain culture of transparency and accountability in using donor funds in accordance with donors directions  
• Expand and update contact database on a regular basis  
• Engage potential donors through a variety of events such as tailgates, special events on campus, symposia and regional outreach events  
• Establish college awards/ceremonies to honor outstanding former students |

<table>
<thead>
<tr>
<th>ADVANCEMENT GOAL</th>
<th>ACTION PLAN</th>
</tr>
</thead>
</table>
| 5 Effectively engage the Advisory Councils in advocacy and philanthropy for the benefit of the college and its students | • Strategically grow membership of Advisory Councils.  
• Involve council members with current students through mechanisms such as mentorship programs, internships, participation  
• Engage council members in raising the visibility of the College and advocating for its mission and goals  
• Ask council members to lead by example by providing introductions to potential future donors and making their own gifts to the College |
### MGsc Online Curriculum Rollout with Course Authors

<table>
<thead>
<tr>
<th>Admission Group</th>
<th>FA 17-A</th>
<th>FA 17-B</th>
<th>SP 18-A</th>
<th>SP 18-B</th>
<th>SU 18-A</th>
<th>SU 18-B</th>
<th>FA 18-A</th>
<th>FA 18-B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GEOG 660 Applications in GIS Klein</td>
<td>GEOG 651 Remote Sensing Filippi</td>
<td>GEOG 6X2 GIS in Petroleum Goldberg</td>
<td>GEOG 619 Petroleum Geology Benavides</td>
<td>GEOG 676 GIS Programming Goldberg</td>
<td>GEOG 678 WebGIS Goldberg</td>
<td>GEOG 6X3 CAPTSONE MGsc Faculty</td>
<td>GEOG 660 Applications in GIS Klein</td>
</tr>
<tr>
<td>2</td>
<td>GEOG 660 Applications in GIS Klein</td>
<td>GEOG 651 Remote Sensing Filippi</td>
<td>GEOG 6X2 GIS in Petroleum Goldberg</td>
<td>GEOG 619 Petroleum Geology Benavides</td>
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</tbody>
</table>
Appendix E: QM/SACS
# Quality Matters™ Rubric Standards

## Quality Matters™ Rubric Standards
Fifth Edition, 2014, with Assigned Point Values

## Standards

<table>
<thead>
<tr>
<th>Course Overview and Introduction</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Instructions make clear how to get started and where to find various course components.</td>
<td>3</td>
</tr>
<tr>
<td>1.2 Learners are introduced to the purpose and structure of the course.</td>
<td>3</td>
</tr>
<tr>
<td>1.3 Etiquette expectations (sometimes called “netiquette”) for online discussions, email, and other forms of communication are clearly stated.</td>
<td>2</td>
</tr>
<tr>
<td>1.4 Course and/or institutional policies with which the learner is expected to comply are clearly stated, or a link to current policies is provided.</td>
<td>2</td>
</tr>
<tr>
<td>1.5 Minimum technology requirements are clearly stated and instructions for use provided.</td>
<td>2</td>
</tr>
<tr>
<td>1.6 Prerequisite knowledge in the discipline and/or any required competencies are clearly stated.</td>
<td>1</td>
</tr>
<tr>
<td>1.7 Minimum technical skills expected of the learner are clearly stated.</td>
<td>1</td>
</tr>
<tr>
<td>1.8 The self-introduction by the instructor is appropriate and is available online.</td>
<td>1</td>
</tr>
<tr>
<td>1.9 Learners are asked to introduce themselves to the class.</td>
<td>1</td>
</tr>
</tbody>
</table>

### Learning Objectives (Competencies)

<table>
<thead>
<tr>
<th>Learning Objectives (Competencies)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 The course learning objectives, or course/program competencies, describe outcomes that are measurable.</td>
<td>3</td>
</tr>
<tr>
<td>2.2 The module/unit learning objectives or competencies describe outcomes that are measurable and consistent with the course-level objectives or competencies.</td>
<td>3</td>
</tr>
<tr>
<td>2.3 All learning objectives or competencies are stated clearly and written from the learner’s perspective.</td>
<td>3</td>
</tr>
<tr>
<td>2.4 The relationship between learning objectives or competencies and course activities is clearly stated.</td>
<td>3</td>
</tr>
<tr>
<td>2.5 The learning objectives or competencies are suited to the level of the course.</td>
<td>3</td>
</tr>
</tbody>
</table>

### Assessment and Measurement

<table>
<thead>
<tr>
<th>Assessment and Measurement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 The assessments measure the stated learning objectives or competencies.</td>
<td>3</td>
</tr>
<tr>
<td>3.2 The course grading policy is stated clearly.</td>
<td>3</td>
</tr>
<tr>
<td>3.3 Specific and descriptive criteria are provided for the evaluation of learners’ work and are tied to the course grading policy.</td>
<td>3</td>
</tr>
<tr>
<td>3.4 The assessment instruments selected are sequenced, varied, and suited to the learner work being assessed.</td>
<td>2</td>
</tr>
<tr>
<td>3.5 The course provides learners with multiple opportunities to track their learning progress.</td>
<td>2</td>
</tr>
</tbody>
</table>

### Instructional Materials

<table>
<thead>
<tr>
<th>Instructional Materials</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 The instructional materials contribute to the achievement of the stated course and module/unit learning objectives or competencies.</td>
<td>3</td>
</tr>
<tr>
<td>4.2 Both the purpose of instructional materials and how the materials are to be used for learning activities are clearly explained.</td>
<td>3</td>
</tr>
<tr>
<td>4.3 All instructional materials used in the course are appropriately cited.</td>
<td>2</td>
</tr>
<tr>
<td>4.4 The instructional materials are current.</td>
<td>2</td>
</tr>
<tr>
<td>4.5 A variety of instructional materials is used in the course.</td>
<td>2</td>
</tr>
<tr>
<td>4.6 The distinction between required and optional materials is clearly explained.</td>
<td>1</td>
</tr>
</tbody>
</table>

### Learner Activities and Learner Interaction

<table>
<thead>
<tr>
<th>Learner Activities and Learner Interaction</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 The learning activities promote the achievement of the stated learning objectives or competencies.</td>
<td>3</td>
</tr>
<tr>
<td>5.2 Learning activities provide opportunities for interaction that support active learning.</td>
<td>3</td>
</tr>
<tr>
<td>5.3 The instructor’s plan for classroom response time and feedback on assignments is clearly stated.</td>
<td>3</td>
</tr>
<tr>
<td>5.4 The requirements for learner interaction are clearly stated.</td>
<td>2</td>
</tr>
</tbody>
</table>

### Course Technology

<table>
<thead>
<tr>
<th>Course Technology</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 The tools used in the course support the learning objectives and competencies.</td>
<td>3</td>
</tr>
<tr>
<td>6.2 Course tools promote learner engagement and active learning.</td>
<td>3</td>
</tr>
<tr>
<td>6.3 Technologies required in the course are readily obtainable.</td>
<td>2</td>
</tr>
<tr>
<td>6.4 The course technologies are current.</td>
<td>1</td>
</tr>
<tr>
<td>6.5 Links are provided to privacy policies for all external tools required in the course.</td>
<td>1</td>
</tr>
</tbody>
</table>

### Learner Support

<table>
<thead>
<tr>
<th>Learner Support</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1 The course instructions articulate or link to a clear description of the technical support offered and how to obtain it.</td>
<td>3</td>
</tr>
<tr>
<td>7.2 Course instructions articulate or link to the institution’s accessibility policies and services.</td>
<td>3</td>
</tr>
<tr>
<td>7.3 Course instructions articulate or link to an explanation of how the institution’s academic support services and resources can help learners succeed in the course and how learners can obtain them.</td>
<td>2</td>
</tr>
<tr>
<td>7.4 Course instructions articulate or link to an explanation of how the institution’s student services and resources can help learners succeed and how learners can obtain them.</td>
<td>1</td>
</tr>
</tbody>
</table>

### Accessibility and Usability

<table>
<thead>
<tr>
<th>Accessibility and Usability</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1 Course navigation facilitates ease of use.</td>
<td>3</td>
</tr>
<tr>
<td>8.2 Information is provided about the accessibility of all technologies required in the course.</td>
<td>3</td>
</tr>
<tr>
<td>8.3 The course provides alternative means of access to course materials in formats that meet the needs of diverse learners.</td>
<td>2</td>
</tr>
<tr>
<td>8.4 The course design facilitates readability.</td>
<td>2</td>
</tr>
<tr>
<td>8.5 Course multimedia facilitate ease of use.</td>
<td>2</td>
</tr>
</tbody>
</table>

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Guidelines for Addressing Distance and Correspondence Education

A Guide for Evaluators Charged with Reviewing Distance and Correspondence Education

This Guide provides assistance for committee members when preparing to serve as evaluators of distance and correspondence education. It should be used in conjunction with the *Principles of Accreditation*, the *Resource Manual*, and the *Handbook for Peer Evaluators* as well as the Commission policy “Distance and Correspondence Education.” It is divided into four sections:

1. An Overview of Commission Expectations
2. Commission Definitions, Standards, and Policies
3. Distance and Correspondence Program Review Activities
   - The design of the review
   - Key persons to be interviewed
   - Generic questions related to distance and correspondence education programs being reviewed
   - Expectations and questions related to standards and requirements of the *Principles*
4. The Application of Findings

An Overview of Expectations

Accreditation is a higher education self-regulatory mechanism that plays a significant role in fostering public confidence in the educational enterprise and student learning, in maintaining minimum standards, and in enhancing institutional effectiveness. It also serves as a means by which institutions recognize and accept one another.

Accreditation’s review process involves making collective professional judgments. The committee’s responsibility is to provide an objective professional judgment to the Commission’s Board of Trustees and to the institution as to (1) the
institution’s status of compliance with the *Principles of Accreditation* and (2) the quality and acceptability of the institution’s Quality Enhancement Plan (applicable to reaffirmations). The committee also provides advice on other areas of educational improvement.

The role of the evaluator is to examine the institution’s mission, policies, procedures, programs, resources and activities that relate to one or more sections or subsections of the *Principles* and then bring to the full committee the findings and any proposed recommendations and comments. To do that, the evaluator will carefully review the institutional documents, interview faculty, staff, and students, and gather information that will enable the evaluator to provide an accurate assessment of the institution.

A committee member is responsible for the following:

- Preparing extensively for the visit/review by studying all training materials, reviewing the institution’s documents and materials, studying the *Principles*, and becoming familiar with the specific assignment to review distance and correspondence learning.
- Participating in all scheduled or special meetings of the committee, including those arranged before the actual review period/visit.
- Applying the standards to the institution’s distance and correspondence education programs and services as well as providing input regarding the application of the other standards.
- Coordinating input from other committee members assigned to review various aspects of distance and correspondence education.
- Contributing to the committee’s collective decisions.
- Developing and writing, or revising and updating, assigned sections of the committee report.

**Commission Definitions, Standards, and Policies**

The Core Requirements, Comprehensive Standards, and Federal Requirements of the *Principles of Accreditation* apply to distance and correspondence education as well as other, more “traditional” methods of delivery. Institutions are responsible for the quality of programs and courses delivered by means of distance education and for ensuring that distance and correspondence education programs offered are complemented by support structures and resources that allow for the total growth and development of students.

The Commission expects institutions to not only meet the *Principles* as applied to distance learning, but also to comply with all related Commission policies. Outlined below is the definition for distance and correspondence education and a summary of policy statements and standards related to distance and correspondence education.

**Definition of Distance Education.** For the purposes of the Commission on College’s accreditation review, distance education is a formal educational process in which the majority of the instruction (interaction between students and instructors and among students) in a course occurs when students and instructors are not in the same place.
Instruction may be synchronous or asynchronous. A distance education course may use the internet; one-way and two-way transmissions through open broadcast, closed circuit, cable, microwave, broadband lines, fiber optics, satellite, or wireless communications devices; audio conferencing; or video cassettes, DVD’s, and CD-ROMs if used as part of the distance learning course or program.

**Definition of Correspondence Education.** Correspondence education is a formal educational process under which the institution provides instructional materials, by mail or electronic transmission, including examinations on the materials, to students who are separated from the instructor. Interaction between the instructor and the student is limited, is not regular and substantive, and is primarily initiated by the student; courses are typically self-paced.

**Policy Statements and Standards.**

1. At the time of review by the Commission, the institution must demonstrate that the student who registers in a distance or correspondence education course or program is the same student who participates in and completes the course or program and receives the credit by verifying the identity of a student who participates in class or coursework by using, at the option of the institution, methods such as (1) a secure login and pass code, (2) proctored examinations, and (3) new or other technologies and practices that are effective in verifying student identification. (*Note: This applies to courses in which the majority of instruction occurs when students and instructor are not in the same place.*)(See also Federal Requirement 4.8. of the Principles of Accreditation.)

2. The institution must have a written procedure for protecting the privacy of students enrolled in distance and correspondence education courses or programs. (See also Federal Requirement 4.8. of the Principles of Accreditation.)

3. The institution must have a written procedure distributed at the time of registration or enrollment that notifies students of any projected additional student charges associated with verification of student identity. (*Note: The publication of fees may also be incorporated into official student documents or institution’s web page that list academic/activities fees for students.*) (See also Federal Requirement 4.8. of the Principles of Accreditation.)

4. An institution that offers distance or correspondence education must ensure that it reports accurate headcount enrollment on its annual Institutional Profile submitted to the Commission.

5. Institutions must ensure that their distance and correspondence education courses and programs comply with the Principles of Accreditation. This applies to all educational programs and services, wherever located or however delivered.
Distance and Correspondence Program Review Activities

The Design of the Review

The design of the review is dependent on a number of factors, some of which include:

1. **Accountability for the delivery and quality of programs.** Consider whether the accountability for the quality of distance learning courses and programs is centralized or decentralized. Is there one office that coordinates the development and quality of distance learning courses/programs or is the accountability decentralized by academic departments or schools? By another means?

2. **Scope of the programs.** Consider the geographical scope of courses and programs offered through distance and correspondence education. Review design might include (1) the review of one site of a similar group of distance learning activities and (2) the review of multiple sites of distance learning activities geographically remote from the main campus (by direct visit, interaction by electronic conferencing, telephone, questionnaire distributed in advance of visit, etc.

3. **The extent of course work/programs.** Consider the number and variety of courses/programs involved where the majority of instruction occurs when students and instructors are not in the same place.

4. **Modes of delivery.** Consider the various modes of instruction offered through technology and student access to those delivery modes.

5. **Access to information regarding the programs.** Consider all information provided by the institution in advance of the review and determine additional information needed to successfully inform evaluators of the courses/programs.

Key Persons to be Interviewed

The distance learning evaluator should review carefully the organizational chart of the institution and study the administrative structure created for the accountability of distance learning activities. Who is accountable for distance learning activities? Although the persons to be evaluated depend on the structure, size, and scope of distance learning activities, the people who should be considered for interviews are:

- Students currently in the programs
- Students who have completed one or more distance learning courses
- Main campus deans and directors responsible for distance learning activities, including those responsible for evaluating student learning
- Main campus faculty and student support and librarians/learning resource personnel involved in the distance learning activities
- Off-site deans, directors, coordinators, faculty, librarians and administrators
- Operational people, such as academic and student services (even though they are neither the driving force behind the programs nor the persons accountable for the quality of programs)
Generic Questions Related to the Distance and Correspondence Education Programs being Reviewed

Before beginning the review, the evaluator should have received information from the institution that addresses the following questions:

- What distance and correspondence learning courses and programs are being offered?
- What are the modes of delivery for the programs? The description should include hybrids of online/face-to-face, etc.
- Where are they offered?
- Why did the institution choose to offer these programs through a distance learning mode?
- Who are responsible for the academic and administrative coordination of the programs?
- Who are “teaching” the courses? Are the faculty of record the same faculty employed by the institution?

If the evaluator is unclear as to the answers to the above questions, then he/she should contact the committee chair so that sufficient background is provided in order for evaluators to begin their reviews.

Expectations and Questions related to the standards and requirements of the Principles

The Commission on Colleges bases its accreditation of degree-granting higher education institutions on requirements outlined in the Principles of Accreditation. These requirements apply to all institutional programs and services, wherever located or however delivered. This includes programs offered through distance and correspondence education. Consequently, member and candidate institutions completing a compliance certification or receiving a committee visit and applicant institutions completing an application for membership should at a minimum address the following areas.

Mission

Expectations: If an institution offers significant distance and correspondence education, it should be reflected in the institution’s mission.

Questions: Is there evidence that the governing board has been involved in the decision to include distance education courses or programs as a part of the institution’s mission?

Are distance learning programs part of the mission statement of the institution? How does the mission of distance learning “fit” the overall mission of the institution?
Is there evidence of understanding on the part of the governing board, the administration, and the faculty concerning how extensive distance education should become?

Organizational Structure

Expectations: Administrative responsibility for all educational programs, including the offering of distance education courses and programs, should be reflected in the organizational structure of the institution.

Questions: What is the administrative structure responsible for the quality of distance learning programs? Does the institution maintain control over distance education programs?

Does the organizational chart for the institution indicate responsibility for distance education?

Does the organizational structure at the institution reflect the relationship between courses/programs offered in traditional formats and courses/programs offered by distance education?

Institutional Effectiveness

Expectations: Comparability of distance and correspondence education programs to campus-based programs and courses is ensured by the evaluation of educational effectiveness, including assessments of student learning outcomes, student retention, and student satisfaction.

The institution regularly assesses the effectiveness of its provision of library/learning resources and student support services for distance or correspondence education students.

Questions: How do distance learning programs fit into the overall plans of the institution?

Who directs the development, planning, and evaluation of distance learning programs? To what extent are faculty members involved?
Has the institution implemented a plan for the collection of data relating to its distance learning programs? Is the collected data used in the planning and evaluation process? Are the research activities for collecting data regularly evaluated?

Is there evidence that outcomes for the program have been identified?

Is there evidence that the effectiveness of the distance education program is regularly assessed and steps taken for improvement of the program? Is the evaluation plan part of a broader institutional plan?

Has the institution developed student learning competencies for the courses/programs offered by distance education? If these are the same competencies for courses/programs offered by “traditional” methodologies, is assessment identified for distance learning students separate from students taking courses by “traditional” methodologies?

Curriculum and Instruction

Expectations: The faculty assumes primary responsibility for and exercises oversight of distance and correspondence education, ensuring both the rigor of programs and the quality of instruction.

The technology used is appropriate to the nature and objectives of the programs and courses and expectations concerning the use of such technology are clearly communicated to students.

Distance and correspondence education policies are clear concerning ownership of materials, faculty compensation, copyright issues, and the use of revenue derived from the creation and production of software, telecourses, or other media products.

Academic support services are appropriate and specifically related to distance and correspondence education.

Program length is appropriate for each of the institution’s educational programs, including those
offered through distance education and correspondence education.

For all degree programs offered through distance or correspondence education, the programs embody a coherent course of study that supports the institution’s mission and is based upon fields of study appropriate to higher education.

For all courses offered through distance or correspondence education, the institution employs sound and acceptable practices for determining the amount and level of credit awarded and justifies the use of a unit other than semester credit hours by explaining its equivalency.

An institution entering into consortial arrangements or contractual agreements for the delivery of courses/programs or services offered by distance or correspondence education is an active participant in ensuring the effectiveness and quality of the courses/programs offered by all of the participants.

The institution’s curriculum designed for distance learning is directly related and appropriate to the mission of the institution.

The institution makes available to students current academic calendars, grading practices, and refund policies.

Questions:

How appropriate are the delivery systems for the programs being offered?

Are admissions, degree completion, curriculum, and instructional design policies and procedures the same as those used for traditional campus-based programs?

Does the institution contract for the delivery of instruction of any or all of its distance learning program with an outside party? Do the contracts provide for quality control by the institution awarding credit for the distance learning course or program? Are provisions of the agreement, contract, or arrangement clearly delineated? Is there provision for regular evaluation of the effectiveness of the arrangement?
Are goals and objectives, and skills and competencies for distance learning programs comparable to those expected for traditional campus-based programs?

Does the administrative structure for provision of distance education courses/programs appropriately involve faculty as well as administrators? What role do the academic departments play in the design and coordination of courses?

Are faculty members in distance learning programs also involved in curriculum development, in coordinating syllabi, and in preparing comprehensive examinations?

Is there appropriate technological assistance for faculty charged with developing distance education courses/programs?

If “outside experts” develop and provide distance education courses/programs, what is the role of the institution’s faculty?

Are the technological delivery modes, instructional design, and resource materials appropriate for the courses and programs? Does the technology used enhance student learning?

Does the institution provide adequate technology for its distance education courses and does it upgrade the technology as needed?

Does the institution make training in technology available to faculty members teaching distance education courses?

Is assistance in use of required technology provided to distance education students who need it?
Faculty

Expectations: An institution offering distance or correspondence learning courses/programs ensures that there is a sufficient number of faculty qualified to develop, design, and teach the courses/programs.

The institution has clear criteria for the evaluation of faculty teaching distance education courses and programs.

Faculty who teach in distance and correspondence education programs and courses receive appropriate training.

Questions: What role is expected of faculty members relative to distance education courses/programs?

Are there policies concerning the expectations of full and part-time faculty planning for, designing, and teaching distance education courses? What is the percentage of full-time/part-time faculty who are involved in courses/programs designated as distance and correspondence education?

Is there evidence that consideration is given to the demands of teaching distance learning courses and do faculty loads reflect this consideration?

What procedures are in place to ensure communication between faculty and students?

What are the defined qualifications for faculty members teaching distance education courses? How does the institution ensure that faculty are qualified to teach those courses?

Is there evidence that the institution has considered the differences between teaching distance education courses and teaching courses offered using “traditional” methodologies?

Does the institution regularly evaluate the effectiveness of faculty members who teach distance education courses? Are the criteria clear for evaluating distance education faculty?
How does the institution orient and train faculty for teaching in these programs?

Does the institution make professional development activities and training available to distance education faculty members and ensure that distance education faculty members engage in that training and professional development?

Is there evaluation of faculty members teaching distance education courses? Is there a clear understanding among distance education faculty members concerning expectations and criteria for evaluation? Does the institution publish its criteria for evaluation of and expectations concerning the teaching of distance education courses? Is there evidence in faculty files of evaluation of distance education faculty members using established and published criteria?

What is the interaction that occurs between students and faculty in these programs and how is the quality of interaction perceived by faculty and students?

**Library\Learning Resources**

**Expectations:** Students have access to and can effectively use appropriate library and learning resources supporting distance learning activities.

Access is provided to laboratories, facilities, and equipment appropriate to the courses or programs

**Questions:** What arrangements has the institution made for ensuring that students have access to appropriate learning resources? Are the resources adequate to support the programs?

What learning resources are available to distance education students?

How are distance education students made aware of the available learning resources?

Do distance education students have access to professional assistance at times when they are likely to need assistance?
How does the institution know that its provision of resources and assistance to distance learning students is adequate?

Does the institution make available to distance education students information concerning what will be needed to access learning resources for their enrolled distance education courses?

Does the institution provide regularly scheduled orientation sessions for distance education students?

Is data available indicating that provision of learning resources to distance education is effective and that it is regularly evaluated and improved where appropriate?

**Student Support Services**

**Expectations:**

Students have adequate access to the range of services appropriate to support the programs offered through distance and correspondence education.

Students in distance or correspondence programs have an adequate procedure for resolving their complaints, and the institution follows its policies and procedures.

Advertising, recruiting, and admissions information adequately and accurately represent the programs, requirements, and services available to students.

Documented procedures assure that security of personal information is protected in the conduct of assessments and evaluations and in the dissemination of results.

Students enrolled in distance education courses are able to use the technology employed, have the equipment necessary to succeed, and are provided assistance in using the technology employed.

**Questions:**

Has the institution made appropriate and necessary adjustments to ensure adequate student development services for students involved in distance learning programs? Is there a supervisor responsible for ensuring such services?
Does the institution have a sufficient number of trained student service personnel to ensure provision of appropriate support in such areas as admissions or counseling?

Does the institution have a sufficient number of trained academic support personnel to ensure provision of academic assistance needed by distance education students?

Does the institution ensure that services are available?

Does the institution provide distance education students with material indicating student services and academic services which are available to them and how to access the services?

How does the institution identify distance education students who need academic assistance and how does it intervene to provide that assistance?

Is there data that demonstrates achievement by distance education students of learning outcomes established by the institution?

Facilities and Finances

Expectations: The institution provides appropriate facilities, equipment, and technical expertise required for distance and correspondence education.

The institution, in making distance and correspondence education courses/programs a part of its mission, provides adequate funding for faculty, staff, services, and technological infrastructure to support the methodology.

Questions: Does the budget reflect provision of funding for needs of distance education at the institution to include technology, faculty, staff, administrative personnel, learning resources, and services? Are the funding needs reflected in the annual budget and in long-range budgetary projections for the institution?
Are the technological resources, means of delivery, and other physical resources available, maintained, staffed, and current?

Are there sufficient financial resources available and committed to support distance learning activities and how is it supported by the budget?

Is there a financial plan for maintaining the support systems needed for the programs, including upgrading systems currently being used and maintaining currency of technological delivery?

What arrangements has the institution made for required laboratories, workshops, etc. associated with distance learning programs?

Federal Requirements

Expectation 1: The institution is expected to provide distance education students with processes by which they can submit complaints.

Questions: Do distance education students know how they may file a complaint and receive feedback on resolution of the complaint? Is there a process by which a distance education student may file a complaint and receive response within a reasonable time is provided to the student upon registration?

Does documentation exist indicating that institutions are responsive to student complaints and to resolving the complaint within a reasonable time period?

Expectation 2: All recruitment materials accurately represent the institution’s practices and policies.

Questions: Who is responsible for ensuring the accuracy of materials used for the recruitment of students? What is the process for maintaining accuracy? Are requirement materials accurate?

Expectation 3: An institution that offers distance or correspondence education demonstrates that the student who registers in a distance or correspondence education course or programs is the same student who
participates in and completes the course or program and receives the credit by verifying the identity of a student who participates in class or coursework by using such methods as (1) a secure login and pass code, (2) proctored examinations, or (3) new or other technologies and practices that are effective in verifying student identification.

Questions: What are the methods used by the institution to verify student identity? Are the methods adequate and effective?

Expectation 4: The institution has a written procedure for protecting the privacy of students enrolled in distance and correspondence education courses or program.

Questions: What is the procedure for protecting the privacy of students enrolled in these courses? Is the procedure adequate and effective?

Expectation 5: If the institution charges students additional fees for costs associated with the verification of student identity, the institution has a written procedure distributed at the time of registration or enrollment that notifies students of any projected additional student charges.

Questions: What is the procedure for notifying students regarding additional student charges associated with such verification? Where is it written and how is the student notified? What is the timing of notification?

The Application of Findings

Following the review of distance and correspondence learning courses and programs, the evaluator, in concert with the other committee members, determines whether the institution meets the standards and the policies of the Commission.

For a reaffirmation of accreditation review or initial accreditation review

If an institution fails to assess its distance and correspondence education in its Compliance Certification when it indicates on its Institutional Summary Form that it offers the courses/programs, then the Off-Site Reaffirmation Committee (Accreditation Committee for applicant institutions) will find the institution noncompliant with CS 3.13.
If an institution partially assesses its distance and correspondence education in its Compliance Certification; that is, evaluates its quality in the application of some standards and not others that are relevant, then the Off-Site Reaffirmation Committee (Accreditation Committee for applicant institutions) will find the institution to be out of compliance with the specific standard(s) not addressed but relevant to distance learning activities. This would be done in lieu of citing CS 3.13.

For a substantive change review
with a focus on distance and correspondence education

In the review of its distance and correspondence education courses/programs, the institution will complete a template listing standards specifically designed for assessing distance learning activities. Therefore, Substantive Change Committees will cite the institution for the standards listed on the template for which it finds the institution to be out of compliance.

For the fifth-year interim review

If an institution fails to assess its distance and correspondence education in its Fifth-Year Compliance Certification when it indicates on its Institutional Summary Form that it offers the courses/programs, then the Fifth-Year Interim Committee will request a Referral Report in which the institution must document compliance with CS 3.13.

If an institution partially assesses its distance and correspondence education; that is, evaluates its quality in the application of some standards and not others that are relevant, then the Fifth-Year Interim Committee will request a Referral Report in which the institution must document compliance with the specific relevant standard(s) not addressed in the Compliance Certification. This would be done in lieu of citing CS 3.13.

Document History
Approved: SACSCOC Executive Council: December 2011
Appendix F: Instructional Design Timetable

Time Line for Online MGsc Courses – Fall A

Ongoing Program Activities
- Curriculum Review for Program Objectives/Outcomes
- Course Template and Branding
- LMS/external application beta testing and configuration
- Student Orientation development
- Amazon Web services beta testing and configuration
- Program Marketing

Weeks 1-4 faculty Course Developer should: [May 15 - June 9]
- Contact Instructional Designer (LaVonne Grandy) to schedule appointment(s)
- Gather existing course resources
- Develop an online syllabus and course orientation
- Faculty Developers/Instructors gain access to all relevant accounts (Canvas, WebEx, etc.)
- Access the Canvas Course Development Shell (template)
- Obtain necessary training for Canvas
- Set-up Canvas modules (topics)
- Develop a module-based course outline with learning objectives for each module including planned activities and assignments
- Identify gaps in alignment between learning objectives and content
- Curate. Search for resources in Learning Object Repositories (i.e. Merlot, Canvas Commons)
- Become familiar with educational technologies for course content development (lecture recording tools, interactive multimedia tools) and schedule development assistance to create content

Deliverable by end of week 4: Detailed course outline completed. Discuss with your ID.

Weeks 5-6 faculty Course Developer should: [June 12 - June 22]
- Develop and collect course materials for introduction module and one other module of their choice (including text, images, sound, video, animation, links or other learning objects as desired)
- Write course introductory module from beginning to end. Record introductory greeting.
- Prepare the other module of their choosing
- Load materials into Canvas
Deliverable by end of week 6: Introductory module and one other course module completed in Canvas. Discuss modules with your ID.

**Weeks 7-12 faculty Course Developer should:** [June 26 - July 27]

- Collect and develop all remaining course materials (including text, images, sound, video, animation, links or other learning objects as desired)
- Write/prepare all course modules
- Upload all course materials into Canvas Course Development Shell (template)
- Review and test all course materials including links and media

Deliverable by end of week 12: Entire course (static content) completed and ready for testing.

**Week 13 – 14 faculty Course Instructor should** [July 31 - August 11]

- Develop a Communication plan outlining means of communication (faculty-to-student, feedback, expectation, online office hours, methods etc.
- Create Discussion Forums/Threads
- Schedule Synchronous meetings – if any
- Create Assignment Instructions, due date, grade and other assignment settings
- Set up Online Grade book in Canvas including weights
- Add any additional content to Canvas Course

Deliverable by end of week 14: All active course content and settings in the Canvas course

**Week 15 [August 14]**

All revisions need to be implemented in the Canvas course by faculty Course Developer

**Week 16 [August 21]**

All Content in Canvas Course. Migrate Development Content to live course shell.

**Week 17 [August 28]**

Session begins. Make course available to registered students.
Time Line for Online MGsc Courses – Fall B

Weeks 1-4 faculty Course Developer should: [June 26 - July 21]

- Contact Instructional Designer (LaVonne Grandy) to schedule appointment(s)
- Gather existing course resources
- Develop an online syllabus and course orientation
- Faculty Developers/Instructors gain access to all relevant accounts (Canvas, WebEx, etc.)
- Access the Canvas Course Development Shell (template)
- Obtain necessary training for Canvas
- Set-up Canvas modules (topics)
- Develop a module-based course outline with learning objectives for each module including planned activities and assignments
- Identify gaps in alignment between learning objectives and content
- Curate. Search for resources in Learning Object Repositories (i.e. Merlot, Canvas Commons)
- Become familiar with educational technologies for course content development (lecture recording tools, interactive multimedia tools) and schedule development assistance to create content

Deliverable by end of week 4: Detailed course outline completed. Discuss with your ID.

Weeks 5-6 faculty Course Developer should: [July 24 – Aug. 4]

- Develop and collect course materials for introduction module and one other module of their choice (including text, images, sound, video, animation, links or other learning objects as desired)
- Write course introductory module from beginning to end. Record introductory greeting.
- Prepare the other module of their choosing
- Load materials into Canvas

Deliverable by end of week 6: Introductory module and one other course module completed in Canvas. Discuss modules with your ID.

Weeks 7-12 faculty Course Developer should: [Aug. 7 – Sept. 15]

- Collect and develop all remaining course materials (including text, images, sound, video, animation, links or other learning objects as desired)
- Write/prepare all course modules
• Upload all course materials into Canvas Course Development Shell (template)
• Review and test all course materials including links and media

Deliverable by end of week 12: Entire course (static content) completed and ready for testing.

Week 13 – 14 faculty Course Instructor should [Sept. 18 - 29]

• Develop a Communication plan outlining means of communication (faculty-to-student, feedback, expectation, online office hours, methods etc.
• Create Discussion Forums/Threads
• Schedule Synchronous meetings – if any
• Create Assignment Instructions, due date, grade and other assignment settings
• Set up Online Grade book in Canvas including weights
• Add any additional content to Canvas Course

Deliverable by end of week 14: All active course content and settings in the Canvas course

Week 15 [October 2]

All revisions need to be implemented in the Canvas course by faculty Course Developer

Week 16 [October 9]

All Content in Canvas Course. Migrate Development Content to live course shell.

Week 17 [October 16]

Session begins. Make course available to registered students.
Final Examination Assessment  
(Master of Geoscience)

Please rank the student's performance by circling the appropriate rank below each learning outcome. This score should reflect the committee's overall assessment (only one form per defense is required, to be signed by the Committee Chair).

1. **Effective verbal communication.** Students graduating with the MGS should be able to communicate their research using appropriate and accurate language in a clear, coherent, and organized presentation of relevant information.

   0%  10%  20%  30%  40%  50%  60%  70%  80%  90%  100%

2. **Effective written communication.** Students graduating with the MGS should be able to communicate their research in the written thesis, using appropriate and accurate language in a clear, coherent, and organized document.

   0%  10%  20%  30%  40%  50%  60%  70%  80%  90%  100%

3. **Demonstration of Research.** Students graduating with the MGS should demonstrate the ability to conduct supervised research in a subfield of geosciences.

   0%  10%  20%  30%  40%  50%  60%  70%  80%  90%  100%

___________________________________________________                       _____________________
Committee Chair:             Date
Final Exam Assessment Rubric – MGS

1. **Effective verbal communication.** Students graduating with the MGS should be able to communicate their research using appropriate and accurate language in a clear, coherent, and organized presentation of relevant information.

   **0 to 10 %:** Student’s verbal communication skills are below expectations and ability of a student graduating with the MGS.

   **11 to 25 %:** Student’s verbal communication is to the minimum standard expected for a graduate with the MGS.

   **26 to 40 %:** Student’s verbal communication abilities are below the average expectation for a graduate with the MGS.

   **41 to 55 %:** Student has average verbal communication abilities for a graduate with the MGS.

   **56 to 70 %:** Student’s verbal communication abilities are above the average expectation for a graduate with the MGS.

   **71 to 85 %:** Student’s verbal communication abilities are significantly above (top 25 to 5 %) average abilities at the MGS level.

   **86 to 100 %:** Student’s verbal communication abilities are exceptional, in the top 5 % of graduates at the MGS level.

2. **Effective written communication.** Students graduating with the MGS should be able to communicate their research in the written project, using appropriate and accurate language in a clear, coherent, and organized document.

   **0 to 10 %:** Student’s written communication skills are below expectations and ability of a student with the MGS.

   **11 to 25 %:** Student’s written communication is to the minimum standard expected for a graduate with the MGS.

   **26 to 40 %:** Student’s written communication abilities are below the average expectation for a graduate with the MGS.

   **41 to 55 %:** Student has average written communication abilities for a graduate with the MGS.

   **56 to 70 %:** Student’s verbal communication abilities are above the average expectation for a graduate with the MGS.
71 to 85 %: Student’s written communication abilities are significantly above (top 25 to 5 %) average abilities with the MGS.

86 to 100 %: Student’s written communication abilities are exceptional, in the top 5 % of graduates with the MGS.

3. **Demonstration of Research.** Students graduating with the MGS should demonstrate the conduct research under the supervision of a faculty member.

0 to 10 %: Student’s mastery of research is below the expectations of a student graduating with the MGS.

11 to 25 %: The student has demonstrated the minimum standard of research expected for a graduate with the MGS.

26 to 40 %: Student’s research ability is below the average expectation for a graduate with the MGS.

41 to 55 %: Student has average research ability for a graduate with the MGS.

56 to 70 %: Student’s research ability is average expectation for a graduate with the MGS.

71 to 85 %: Student’s research ability is significantly above (top 25 to 5 %) average abilities at the MGS level.

86 to 100 %: Student’s research ability is exceptional, in the top 5 % of graduates at the MGS level.

4. **Demonstration of Sub-field Knowledge.** Students graduating with the MGS should demonstrate knowledge of one subfield of geosciences.

0 to 10 %: Student’s mastery of subfield is below the expectations of a student graduating with the MGS.

11 to 25 %: The student has demonstrated the minimum standard of mastery of subfield expected for a graduate with the MGS.

26 to 40 %: Student’s mastery of subfield is below the average expectation for a graduate with the MGS.

41 to 55 %: Student has average mastery of subfield for a graduate with the MGS.
56 to 70 %: Student’s mastery of subfield ability the average expectation for a graduate with the MGS.

71 to 85 %: Student’s mastery of subfield is significantly above (top 25 to 5 %) average abilities at the MGS level.

86 to 100 %: Student’s mastery of subfield is exceptional, in the top 5 % of graduates at the MGS level.
### Appendix H: Teaching for Fillippi, Klein, Goldberg

<table>
<thead>
<tr>
<th>Anthony Fillippi</th>
<th>Course Enrollment per Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code</strong></td>
<td><strong>Title</strong></td>
</tr>
<tr>
<td>GEOG 361</td>
<td>Remote Sensing in Geosciences</td>
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<tr>
<td>GEOG 651</td>
<td>Remote Sensing for Geographical Analysis</td>
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<tr>
<td>GEOG 475</td>
<td>Advanced Topics in GIS</td>
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<td>GEOG 695</td>
<td>Frontiers in Geographic Information Science</td>
</tr>
<tr>
<td>GEOG 665</td>
<td>GIS-Based Spatial Analysis and Modeling</td>
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<td>GEOG 476</td>
<td>GIS Practicum</td>
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<th>Daniel Goldberg</th>
<th>Course Enrollment per Semester</th>
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<td><strong>Code</strong></td>
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<td>Principles of Geographic Information Systems</td>
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<td>Applications in GIS</td>
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<td>GEOG 665</td>
<td>GIS-Based Spatial Analysis and Modeling</td>
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<td>GEOG 489</td>
<td>GIS Programming</td>
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<td>GIS Programming</td>
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<td>WebGIS</td>
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<td>GEOG 391</td>
<td>Geodatabases</td>
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<td>GEOG 676</td>
<td>GIS Programming</td>
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<table>
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<th>Andrew Klein</th>
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<td><strong>Title</strong></td>
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<td>GEOG 232</td>
<td>Cartography and Visualization</td>
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<td>GEOG 332</td>
<td>Thematic Cartography</td>
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<td>GEOG 476</td>
<td>GIS Practicum</td>
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<td>GEOG 661</td>
<td>Digital Image Processing and Analysis</td>
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<td>GEOG 696</td>
<td>Geomorphology and Remote Sensing</td>
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<td>GEOG 660</td>
<td>Applications in GIS</td>
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<tr>
<td>GEOG 352</td>
<td>GNSS in the Geosciences</td>
</tr>
</tbody>
</table>
## Appendix I: Retention and Graduation Rates

**Master Retention/Graduation Rates, GEOS**  
(Retained/graduated from the same Major as initially enrolled)

<table>
<thead>
<tr>
<th>Cohort Year</th>
<th>Initial Cohort Count</th>
<th>1 - Yr Percent Retained within Department</th>
<th>1 - Yr Percent Graduated within Department</th>
<th>2 - Yr Percent Retained within Department</th>
<th>2 - Yr Percent Graduated within Department</th>
<th>3 - Yr Percent Retained within Department</th>
<th>3 - Yr Percent Graduated within Department</th>
<th>4 - Yr Percent Retained within Department</th>
<th>4 - Yr Percent Graduated within Department</th>
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<tr>
<td>2003</td>
<td>2</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>2004</td>
<td>1</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2006</td>
<td>1</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2007</td>
<td>1</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
<td>2008</td>
<td>1</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
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<tr>
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<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
<td>50%</td>
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<tr>
<td>2011</td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

**Master Retention/Graduation Rates, College of GE**  
(Retained/graduated from the same Major as initially enrolled)

<table>
<thead>
<tr>
<th>Cohort Year</th>
<th>Initial Cohort Count</th>
<th>1 - Yr Percent Retained within Department</th>
<th>1 - Yr Percent Graduated within Department</th>
<th>2 - Yr Percent Retained within Department</th>
<th>2 - Yr Percent Graduated within Department</th>
<th>3 - Yr Percent Retained within Department</th>
<th>3 - Yr Percent Graduated within Department</th>
<th>4 - Yr Percent Retained within Department</th>
<th>4 - Yr Percent Graduated within Department</th>
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<tbody>
<tr>
<td>2003</td>
<td>46</td>
<td>93%</td>
<td>73%</td>
<td>17%</td>
<td>26%</td>
<td>56%</td>
<td>10%</td>
<td>67%</td>
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<tr>
<td>2004</td>
<td>41</td>
<td>90%</td>
<td>63%</td>
<td>19%</td>
<td>19%</td>
<td>60%</td>
<td>7%</td>
<td>73%</td>
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<tr>
<td>2005</td>
<td>45</td>
<td>88%</td>
<td>64%</td>
<td>20%</td>
<td>28%</td>
<td>55%</td>
<td>15%</td>
<td>71%</td>
<td></td>
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<tr>
<td>2006</td>
<td>41</td>
<td>80%</td>
<td>34%</td>
<td>34%</td>
<td>17%</td>
<td>56%</td>
<td>9%</td>
<td>63%</td>
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<tr>
<td>2007</td>
<td>42</td>
<td>88%</td>
<td>61%</td>
<td>23%</td>
<td>21%</td>
<td>52%</td>
<td>16%</td>
<td>61%</td>
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<tr>
<td>2008</td>
<td>36</td>
<td>80%</td>
<td>55%</td>
<td>19%</td>
<td>19%</td>
<td>50%</td>
<td>2%</td>
<td>61%</td>
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<tr>
<td>2009</td>
<td>59</td>
<td>88%</td>
<td>61%</td>
<td>22%</td>
<td>28%</td>
<td>49%</td>
<td>15%</td>
<td>64%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>62</td>
<td>88%</td>
<td>38%</td>
<td>40%</td>
<td>16%</td>
<td>64%</td>
<td>6%</td>
<td>74%</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>54</td>
<td>83%</td>
<td>55%</td>
<td>22%</td>
<td>24%</td>
<td>50%</td>
<td>16%</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>59</td>
<td>93%</td>
<td>59%</td>
<td>28%</td>
<td>22%</td>
<td>66%</td>
<td>8%</td>
<td>79%</td>
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<tr>
<td>2013</td>
<td>61</td>
<td>77%</td>
<td>49%</td>
<td>31%</td>
<td>18%</td>
<td>57%</td>
<td></td>
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</table>
January 2, 2017

TO: External Program Reviewers and Program Accreditors

FROM: Michael T. Stephenson
Associate Provost for Academic Affairs and SACSCOC Accreditation Liaison

RE: Information required for USDOE Accreditating Bodies

Texas A&M University is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, master's, and doctoral degrees. Consistent with comprehensive standard 3.13.1, the following provides the institution’s official position on its purpose, governance, programs, degrees, diplomas, certificates, personnel, finances, and constituencies and is published in official university documents as noted.

**Purpose**

Classified by the Carnegie Foundation as a Research Doctoral University (Highest Research Activity), Texas A&M embraces its mission of the advancement of knowledge and human achievement in all its dimensions. The research mission is a key to advancing economic development in both public and private sectors. Integration of research with teaching prepares students to compete in a knowledge-based society and to continue developing their own creativity, learning, and skills beyond graduation.

The institution’s official mission statement, published both on the institution’s web page as well as in its annual university catalog, is:

Texas A&M University (Texas A&M) is dedicated to the discovery, development, communication and application of knowledge in a wide range of academic and professional fields. Its mission of providing the highest quality undergraduate and graduate programs is inseparable from its mission of developing new understandings through research and creativity. It prepares students to assume roles in leadership, responsibility and service to society. Texas A&M assumes as its historic trust the maintenance of freedom of inquiry and an intellectual environment nurturing the human mind and spirit. It welcomes and seeks to serve persons of all racial, ethnic and geographic groups, women and men alike, as it addresses the needs of an increasingly diverse population and a global economy. In the twenty-first century, Texas A&M University seeks to assume a place of preeminence among public universities while respecting its history and traditions.

**Governance**

The governance of the institution was described in the 2012 certification of compliance submitted to SACSCOC.
Texas A&M University at College Station, the flagship institution of the Texas A&M University System, has branch campuses located in Galveston, Texas and Doha, Qatar. A ten-member Board of Regents, appointed by the Governor, directs the Texas A&M System. The appointment of each Regent follows Texas Education Code (TEC, Chapter 85, Section 21).

TEC outlines the duties and responsibilities of the Board of Regents. These responsibilities are also defined in System Policy 02.01 Board of Regents and TEC 51.352. The Board elects two officers: Chair and Vice Chair. There are four standing committees: Audit, Academic & Student Affairs, Finance, and Buildings & Physical Plant. Special committees may be appointed by the Chair with Board approval.

At Texas A&M University the President is the chief executive officer; the President is not the presiding officer of the Board of Regents. The President reports to the state-appointed Board of Regents through the Chancellor of the Texas A&M University System. System Policy 2.05 Presidents of System Member Universities defines the duties of the President. The appointment of the President follows conditions set forth in System Policy 01.03 Appointing Power and Terms and Conditions of Employment, section 2.2.

**Personnel**

The institution is led by the President and members of his cabinet:

- Michael K. Young, President
- Karan L. Watson, Provost and Executive Vice President
- Jerry R. Strawser, Executive Vice President for Finance and Administration and CFO
- Michael Benedik, Vice Provost
- M. Dee Childs, Vice President for Information Technology and CIO
- Michael G. O’Quinn, Vice President for Government Relations
- Dr. Douglas Palmer, Interim Vice President and COO, TAMU-Galveston
- Barbara A. Abercrombie, Vice President for HR & Organizational Effectiveness
- Jessica Rubie, Associate Vice President for Strategic Initiatives
- Christine Stanley, Vice President and Associate Provost for Diversity
- Amy B. Smith, Senior Vice President and Chief Marking & Communications Officer
- Glen A. Laine, Vice President for Research
- Carrie L. Byington, Senior Vice President TAMU Health Science Center, Dean of the College of Medicine, and Vice Chancellor for Health Services
- Daniel J. Pugh, Sr., Vice President for Student Affairs
- Gen Joe E. Ramirez, Jr. Commandant, Corps of Cadets
- Amy B. Smith, Senior Vice President and Chief Marketing and Communications Officer
- Scott Woodward, Director of Athletics

**Programs, Degrees, Diplomas, and Certificates**

See the Institutional Summary submitted to SACSCOC

**Finances**

See the Financial Profile 2016 submitted to SACSCOC
INSTITUTIONAL SUMMARY FORM
PREPARED FOR COMMISSION REVIEWS

GENERAL INFORMATION

Name of Institution  Texas A&M University

Name, Title, Phone number, and email address of Accreditation Liaison
Michael T. Stephenson
Associate Provost for Academic Affairs and SACSCOC Accreditation Liaison
979.845.4016
mstephenson@tamu.edu

Name, Title, Phone number, and email address of Technical Support person for the Compliance Certification
Alicia M. Dorsey
Assistant Provost for Institutional Effectiveness
979.862.2918
amdorsey@tamu.edu

IMPORTANT:

Accreditation Activity (check one):

☑ Submitted at the time of Reaffirmation Orientation
☐ Submitted with Compliance Certification for Reaffirmation
☐ Submitted with Materials for an On-Site Reaffirmation Review
☐ Submitted with Compliance Certification for Fifth-Year Interim Report
☐ Submitted with Compliance Certification for Initial Candidacy/Accreditation Review
☐ Submitted with Merger/Consolidations/Acquisitions
☐ Submitted with Application for Level Change

Submission date of this completed document: September 29, 2015
EDUCATIONAL PROGRAMS

1. Level of offerings (Check all that apply)

☐ Diploma or certificate program(s) requiring less than one year beyond Grade 12
☐ Diploma or certificate program(s) of at least two but fewer than four years of work beyond Grade 12
☐ Associate degree program(s) requiring a minimum of 60 semester hours or the equivalent designed for transfer to a baccalaureate institution
☐ Associate degree program(s) requiring a minimum of 60 semester hours or the equivalent not designed for transfer
☒ Four or five-year baccalaureate degree program(s) requiring a minimum of 120 semester hours or the equivalent
☒ Professional degree program(s)
☒ Master's degree program(s)
☒ Work beyond the master's level but not at the doctoral level (such as Specialist in Education)
☒ Doctoral degree program(s)
☐ Other (Specify) ______

2. Types of Undergraduate Programs (Check all that apply)

☐ Occupational certificate or diploma program(s)
☐ Occupational degree program(s)
☐ Two-year programs designed for transfer to a baccalaureate institution
☒ Liberal Arts and General
☒ Teacher Preparatory
☒ Professional
☐ Other (Specify) ______

GOVERNANCE CONTROL

Check the appropriate governance control for the institution:

☐ Private (check one)

☐ Independent, not-for-profit

Name of corporation OR
Name of religious affiliation and control: ______

☐ Independent, for-profit *

If publicly traded, name of parent company: ______
☑ Public state * (check one)
   ☐ Not part of a state system, institution has own independent board
   ☑ Part of a state system, system board serves as governing board
   ☐ Part of a state system, system board is super governing board, local governing board has delegated authority
   ☐ Part of a state system, institution has own independent board

* If an institution is part of a state system or a corporate structure, a description of the system operation must be submitted as part of the Compliance Certification for the decennial review. See Commission policy “Reaffirmation of Accreditation and Subsequent Reports” for additional direction.

INSTITUTIONAL INFORMATION FOR REVIEWERS

Directions:
Please address the following and attach the information to this form.

1. History and Characteristics
Provide a brief history of the institution, a description of its current mission, an indication of its geographic service area, and a description of the composition of the student population. Include a description of any unusual or distinctive features of the institution and a description of the admissions policies (open, selective, etc.). If appropriate, indicate those institutions that are considered peers. Please limit this section to one-half page.

2. List of Degrees
List all degrees currently offered (A. S., B.A., B.S., M.A., Ph.D., for examples) and the majors or concentrations within those degrees, as well as all certificates and diplomas. For each credential offered, indicate the number of graduates in the academic year previous to submitting this report. Indicate term dates.

3. Off-Campus Instructional Locations and Branch Campuses
List all locations where 50% or more credit hours toward a degree, diploma, or certificate can be obtained primarily through traditional classroom instruction. Report those locations in accord with the Commission’s definitions and the directions as specified below.

Off-campus instructional sites—a site located geographically apart from the main campus at which the institution offers 50% or more of its credit hours for a diploma, certificate, or degree. This includes high schools where courses are offered as part of dual enrollment. For each site, provide the information below. The list should include only those sites reported and approved by SACSCOC. Listing unapproved sites below does not constitute reporting them to SACSCOC. In such cases when an institution has initiated an off-campus instructional site as described above without prior approval by SACSCOC, a prospectus for approval should be submitted immediately to SACSCOC.
### Institutions with off-campus instructional sites

At which the institution offers 25-49% credit hours for a diploma, certificate, or degree—including high schools where courses are offered as dual enrollment—are required to notify SACSCOC in advance of initiating the site. For each site, provide the information below.

<table>
<thead>
<tr>
<th>Name of Site (Indicate if site is currently active or inactive. If inactive, date of last course offerings and date of projected reopening)</th>
<th>Physical Address (street, city, state, country) Do not include PO Boxes.</th>
<th>Date Notified SACSCOC by SACSCOC</th>
<th>Date Implemented by the institution</th>
<th>Educational programs offered (specific degrees, certificates, diplomas) with 25-49% credit hours offered at each site</th>
<th>Is the site currently active? (At any time during the past 5 years, have students been enrolled and courses offered? If not, indicate the date of most recent activity.)</th>
</tr>
</thead>
</table>

### Branch campus

An instructional site located geographically apart and independent of the main campus of the institution. A location is independent of the main campus if the location is (1) permanent in nature, (2) offers courses in educational programs leading to a degree, certificate, or other recognized educational credential, (3) has its own faculty and administrative or supervisory organization, and (4) has its own budgetary and hiring authority. **The list should include only those branch campuses reported and approved by SACSCOC.** Listing unapproved branch campuses below does not constitute reporting them to SACSCOC. A prospectus for an unapproved branch campuses should be submitted immediately to SACSCOC.

<table>
<thead>
<tr>
<th>Name of Branch Campus</th>
<th>Physical Address (street, city, state, country) Do not include PO Boxes.</th>
<th>Date Approved by SACSCOC</th>
<th>Date Implemented by the institution</th>
<th>Educational programs offered (specific degrees, certificates, diplomas) with 50% or more credits hours offered at the branch campus</th>
<th>Is the campus currently active? (At any time during the past 5 years, have students been enrolled and courses offered? If not, indicate the date of most recent activity.)</th>
</tr>
</thead>
</table>

4. **Distance and Correspondence Education**

Appendix J-222
Provide an initial date of approval for your institution to offer distance education. Provide a list of credit-bearing educational programs (degrees, certificates, and diplomas) where 50% or more of the credit hours are delivered through distance education modes. For each educational program, indicate whether the program is delivered using synchronous or asynchronous technology, or both. For each educational program that uses distance education technology to deliver the program at a specific site (e.g., a synchronous program using interactive videoconferencing), indicate the program offered at each location where students receive the transmitted program. Please limit this description to one page, if possible.

5. Accreditation

(1) List all agencies that currently accredit the institution and any of its programs and indicate the date of the last review by each.

(2) If SACS Commission on Colleges is not your primary accreditor for access to USDOE Title IV funding, identify which accrediting agency serves that purpose.

(3) List any USDOE recognized agency (national and programmatic) that has terminated the institution's accreditation (include the date, reason, and copy of the letter of termination) or list any agency from which the institution has voluntarily withdrawn (include copy of letter to agency from institution).

(4) Describe any sanctions applied or negative actions taken by any USDOE-recognized accrediting agency (national, programmatic, SACSCOC) during the two years previous to the submission of this report. Include a copy of the letter from the USDOE to the institution.

6. Relationship to the U.S. Department of Education

Indicate any limitations, suspensions, or termination by the U.S. Department of Education in regard to student financial aid or other financial aid programs during the previous three years. Report if on reimbursement or any other exceptional status in regard to federal or state financial aid.

Document History
Adopted: September 2004
Revised: March 2011
Revised: January 2014
1. History and Characteristics

Provide a brief history of the institution, a description of its current mission, an indication of its geographic service area, and a description of the composition of the student population. Include a description of any unusual or distinctive features of the institution and a description of the admissions policies (open, selective, etc.). If appropriate, indicate those institutions that are considered peers. Please limit this section to one-half page.

History. Texas A&M University was established in 1871 as the state's first public institution of higher education and opened for classes in 1876. We are now one of a select few institutions in the nation to hold land grant, sea grant (1971) and space grant (1989) designations. We are also one of few universities to host a presidential library; the George Bush Presidential Library and Museum opened in 1997. A mandatory military component was a part of the land grant designation until 1965 and today we are one of only three institutions with a full-time corps of cadets, leading to commissions in all branches of service. We have two branch campuses, one in Galveston, Texas, (established in 1962, officially merged with Texas A&M in 1991) and one in Doha, Qatar (established in 2003). In 2001 we were admitted to the Association of American Universities (AAU) and in 2004 to Phi Beta Kappa. We are classified by the Carnegie Foundation as a Research University (very high research activity).

Mission. Texas A&M University is dedicated to the discovery, development, communication, and application of knowledge in a wide range of academic and professional fields. Its mission of providing the highest quality undergraduate and graduate programs is inseparable from its mission of developing new understandings through research and creativity. It prepares students to assume roles in leadership, responsibility and service to society. Texas A&M assumes as its historic trust the maintenance of freedom of inquiry and an intellectual environment nurturing the human mind and spirit. It welcomes and seeks to serve persons of all racial, ethnic and geographic groups as it addresses the needs of an increasingly diverse population and a global economy. In the 21st century, Texas A&M University seeks to assume a place of preeminence among public universities while respecting its history and traditions.

Enrollment Profile.
77.42% Undergraduate, 18.41% Graduate, 4.02% Professional, and 0.14% Post-Doc Certificate

Undergraduate Students:
93.58% Texas Residents, 3.96% non-Texas Residents, 2.46% non-Texas, non-US Residents;
62.41% White, 3.11% Black, 22.33% Hispanic, 6.21% Asian

Graduate Students:
45.09% Texas Residents, 16.57% non-Texas Residents, 38.34% non-Texas, non-US Residents
Admissions Process. Selective. Automatic admission for Texas resident applicants in the top 10% of their high school graduating class; automatic admission for applicants who rank in the top 25% of their high school graduating class and achieve a combined (old) SAT math and SAT critical reading score of at least 1300 with a test score of at least 600 in each component, or combined (newly redesigned) SAT math and SAT evidence based reading and writing (EBRW) score of at least 1360 with a test score of at least 620 in Math and 660 in EBRW, or 30 composite on the ACT with a 27 in the math and English components; review of all other applicants based on academic potential, distinguishing characteristics, exceptional circumstances and personal achievements.

Peer Institutions. Georgia Institution of Technology, Ohio State University, Pennsylvania State University, Purdue University, University of California- Berkeley, Davis, Los Angeles, San Diego, University of Florida, University of Illinois – Champaign/Urbana, University of Michigan, University of Minnesota, University of North Carolina – Chapel Hill, University of Texas – Austin, and University of Wisconsin – Madison.
## 2. List of Degrees

List all degrees currently offered (A. S., B.A., B.S., M.A., Ph.D., for examples) and the majors or concentrations within those degrees, as well as all certificates and diplomas. For each credential offered, indicate the number of graduates in the academic year previous to submitting this report. Indicate term dates.

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3. Off-Campus Instructional Locations and Branch Campuses

List **all locations** where 50% or more credit hours toward a degree, diploma, or certificate can be obtained primarily through traditional classroom instruction. Report those locations in accord with the Commission’s definitions and the directions as specified below.

**Off-campus instructional sites**—a site located geographically apart from the main campus at which the institution offers **50% or more** of its credit hours for a diploma, certificate, or degree. This includes high schools where courses are offered as part of dual enrollment. For each site, provide the information below. **The list should include only those sites reported and approved by SACSCOC.** Listing unapproved sites below does not constitute reporting them to SACSCOC. In such cases when an institution has initiated an off-campus instructional site as described above without prior approval by SACSCOC, a prospectus for approval should be submitted immediately to SACSCOC.

### Off-Campus Instructional Locations – 50% or more.

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<th>Physical Address (street, city, state, country) Do not include PO Boxes.</th>
<th>Date Approved by SACSCOC</th>
<th>Date Implemented by the institution</th>
<th>Educational programs offered (specific degrees, certificates, diplomas) with 50% or more credits hours offered at each site</th>
<th>Is the site currently active? (At any time during the past 5 years, have students been enrolled and courses offered? If not, indicate the date of most recent activity.)</th>
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<td>Saudi Aramco – Box 8926 Training &amp; Career Development South Administration Building, Room 242 Dhahran 31311 Saudi Arabia</td>
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<td>Educational programs offered (specific degrees, certificates, diplomas) with 50% or more credits hours offered at each site</td>
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<td>Institute of Biosciences and Technology</td>
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<td>College of Medicine - Temple</td>
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<td>Clinical Learning Resource Center</td>
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<td>Houston Methodist Hospital</td>
<td>8670 Bertner Avenue, R2-216 Houston, TX 77030</td>
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| Baylor University Medical Center | 3500 Gaston Avenue Dallas, TX 75246 | 2012 | 2011 | MEDICINE MD Yes | Appendix J-242
## Off-Campus Instructional Locations – 25%-49%.

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<th>Name of Site (Indicate if site is currently active or inactive. If inactive, date of last course offerings and date of projected reopening)</th>
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## Branch Campuses

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<th>Date Implemented by the Institution</th>
<th>Educational programs (specific degrees, certificates, diplomas) with 50% or more credits hours offered at the branch campus</th>
<th>Is the campus currently active? (At any time during the past 5 years, have students been enrolled and courses offered? If not, indicate the date of most recent activity.)</th>
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<td>Texas A&amp;M University at Galveston</td>
<td>200 Seawolf Pkwy. Galveston, TX 77553</td>
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<td>1991</td>
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<td>OFFSHORE &amp; COASTAL SYSTEMS ENGINEER BS</td>
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<td>MARINE BIOLOGY MS</td>
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<td>MARINE BIOLOGY PHD</td>
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<td>MARINE ENGINEERING TECHNOLOGY BS</td>
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<td>MARINE FISHERIES BS</td>
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<td>MARINE RESOURCES MANAGEMENT MMR</td>
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<td>MARINE SCIENCES BS</td>
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<td>MARINE TRANSPORTATION BS</td>
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<td>MARITIME STUDIES BA</td>
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<td>UNIVERSITY STUDIES – BS</td>
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</table>
4. Distance and Correspondence Education

Provide an initial date of approval for your institution to offer distance education. Provide a list of credit-bearing educational programs (degrees, certificates, and diplomas) where 50% or more of the credit hours are delivered through distance education modes. For each educational program, indicate whether the program is delivered using synchronous or asynchronous technology, or both. For each educational program that uses distance education technology to deliver the program at a specific site (e.g., a synchronous program using interactive videoconferencing), indicate the program offered at each location where students receive the transmitted program. Please limit this description to one page, if possible.

<table>
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<tr>
<th>Credit Bearing Degree Programs</th>
<th>Site</th>
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<tr>
<td>AGRICULTURAL EDUCATION</td>
<td>EDD</td>
<td>Synchronous course offered worldwide via PC or LMS</td>
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<tr>
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<td>MS</td>
<td>Asynchronous</td>
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<td>MS</td>
<td>Asynchronous</td>
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<tr>
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<td>MED</td>
<td>Asynchronous</td>
</tr>
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<td>MS</td>
<td>Asynchronous</td>
</tr>
<tr>
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<td>MENGR</td>
<td>Asynchronous</td>
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<tr>
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<td>MENGR</td>
<td>Synchronous course offered worldwide via PC or LMS</td>
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<tr>
<td>CURRICULUM &amp; INSTRUCTION</td>
<td>EDD</td>
<td>Asynchronous</td>
</tr>
<tr>
<td>CURRICULUM &amp; INSTRUCTION</td>
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<td>Asynchronous</td>
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<td>Degree</td>
<td>Format</td>
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<td>EDUCATION FOR HEALTH CARE PROFESSIONALS</td>
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<td>Asynchronous</td>
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<tr>
<td>EDUCATIONAL ADMINISTRATION</td>
<td>MED</td>
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<td>MED</td>
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<td>MS</td>
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<td>MARITIME ADMINISTRATION &amp; LOGISTICS</td>
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<td>PUBLIC SERVICE AND ADMINISTRATION</td>
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<tr>
<td>RECREATION &amp; RESOURCES DEVELOPMENT</td>
<td>MRRD</td>
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<td>SPORTS MANAGEMENT MS</td>
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<tr>
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<tr>
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<td>APPLIED BEHAVIOR ANALYSIS CERT</td>
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<td>EDUCATION FOR HEALTHCARE PROFESSIONALS CERT</td>
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<td>ENERGY SUSTAINABILITY ENGINEERING CERT</td>
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<td>FORENSIC HEALTH CARE CERT</td>
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<td>HOMELAND SECURITY CERT</td>
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<tr>
<td>INDUSTRIAL DATA ANALYTICS CERT</td>
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<td>NATIONAL SECURITY AFFAIRS CERT</td>
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<td>NONPROFIT MANAGEMENT CERT</td>
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<tr>
<td>PUBLIC HEALTH CERT</td>
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<tr>
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5. Accreditation

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<thead>
<tr>
<th>Accreditation Council for Pharmacy Education</th>
<th>The pharmacy professional degree program</th>
<th>Last Review: April 2014</th>
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<tbody>
<tr>
<td>American Council for Construction Education</td>
<td>The B.S. and M.S. curriculum in construction science</td>
<td>Last Review: 2011 (B.S.) and 2012 (M.S.)</td>
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<tr>
<td>American Psychological</td>
<td>The clinical psychology program</td>
<td>Last Review: April/May 2015</td>
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<tr>
<td>Association</td>
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<tr>
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<td><strong>Association</strong></td>
<td>in the Department of Psychology and the counseling psychology and school psychology program in the Department of Educational Psychology</td>
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<tr>
<td><strong>American Veterinary Medical Association Council on Education</strong></td>
<td>The veterinary medicine degree program</td>
<td>Last Review: 2013</td>
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<tr>
<td><strong>Association to Advance Collegiate Schools of Business (AACSB)</strong></td>
<td>The business baccalaureate, master’s, and doctoral programs in Mays Business School</td>
<td>Last Review: Fall 2012</td>
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<td>The dietetic track in the nutritional sciences curriculum and the dietetic internship program</td>
<td>Last review: January 2015</td>
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<tr>
<td><strong>Commission on Accreditation of Athletic Training Education (caATe)</strong></td>
<td>Athletic Training (College of Education)</td>
<td>Last Review: 2013</td>
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<tr>
<td><strong>Commission on Accreditation of Healthcare Management Education</strong></td>
<td>The Master of Health Administration</td>
<td>Last Review: Fall 2010</td>
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<tr>
<td><strong>Commission on Collegiate Nursing Education and the Texas Board of Nursing</strong></td>
<td>The nursing degree programs</td>
<td>Last Review: July 2013</td>
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<tr>
<td><strong>Commission on Dental Accreditation (CODA)</strong></td>
<td>The degree programs in dentistry and dental hygiene and the certificate programs in the ten advanced dental graduate education programs</td>
<td>Last Review: August 2013</td>
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<tr>
<td><strong>Commission on English Language Program Accreditation (CEA)</strong></td>
<td>The English Language Institute</td>
<td>Last review: 2013</td>
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<tr>
<td><strong>Computing Accreditation Commission of ABET</strong></td>
<td>The computer science program</td>
<td>Last review: 2010</td>
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<tr>
<td><strong>Council of the Section of Legal Education and Admissions to the Bar of the American Bar Association</strong></td>
<td>Texas A&amp;M University School of Law</td>
<td>Last review: 2010</td>
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<td><strong>Council on Education for Public Health</strong></td>
<td>The School of Public Health degree programs</td>
<td>Last Review: April 2011</td>
</tr>
<tr>
<td><strong>Engineering Accreditation Commission of ABET</strong></td>
<td>Undergraduate programs in aerospace, biological and agricultural, biomedical, chemical, civil, computer, electrical, industrial, mechanical, nuclear, ocean, petroleum and radiological health engineering</td>
<td>Last Review: 2010-2011 (College Station) and 2015 (Qatar)</td>
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<td><strong>Engineering Accreditation Commission of ABET</strong></td>
<td>Maritime systems engineering (Offshore and Coastal Systems Engineering) – TAMU Galveston</td>
<td>Last review: 2010-11</td>
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<td>Last Review</td>
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<td>Engineering Technology Accreditation Commission of ABET</td>
<td>The electronic systems engineering technology program, the manufacturing and mechanical engineering technology program,</td>
<td>Last Review: 2013-2014 (College Station) and 2015 (Qatar)</td>
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<td>Engineering Technology Accreditation Commission of ABET</td>
<td>marine engineering technology – TAMU Galveston</td>
<td>Last Review: 2013-14</td>
</tr>
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<td>Forensic Science Education Programs Accreditation Commission (FEPAC)</td>
<td>The forensics and investigative sciences program</td>
<td>Last Site Visit: October 2011 Accreditation dates: 1/2012-1/2017</td>
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<td>Institute of Food Technologists</td>
<td>The food science and technology curriculum</td>
<td>Last Review: December 2011</td>
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<td>The curriculum in landscape architecture</td>
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<td>Liaison Committee on Medical Education</td>
<td>The medical education degree program</td>
<td>Last Review: August 2012</td>
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<tr>
<td>National Architectural Accrediting Board</td>
<td>The curriculum in architecture</td>
<td>Last Review: March 2013</td>
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<tr>
<td>Network of Schools of Public Policy, Affairs, and Administration</td>
<td>The Master of Public Service and Administration degree in the Bush School of Government and Public Service</td>
<td>Last review: April 2014</td>
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<td>National Recreation and Park Association</td>
<td>The curriculum in recreation, park and tourism sciences</td>
<td>Last Review: June 2010</td>
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<td>The Master of Urban Planning curriculum</td>
<td>Last Review: 2013</td>
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<td>Society for Range Management</td>
<td>The curriculum in rangeland ecology and management</td>
<td>Last Review: 2006</td>
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<tr>
<td>Society of American Foresters</td>
<td>The curriculum in forestry</td>
<td>Last Review: 2013</td>
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<tr>
<td>State Board of Educator Certification Texas Education Agency</td>
<td>Programs in professional education and degrees conferred by Texas A&amp;M University</td>
<td>Last review 2011</td>
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</tbody>
</table>

(2) If SACS Commission on Colleges is not your primary accreditor for access to USDOE Title IV funding, identify which accrediting agency serves that purpose.

Not applicable.

(3) List any USDOE recognized agency (national and programmatic) that has terminated the institution’s accreditation (include the date, reason, and copy of the letter of termination) or list any agency from which the institution has voluntarily withdrawn (include copy of letter to agency from institution).

None.
(4) Describe any sanctions applied or negative actions taken by any USDOE-recognized accrediting agency (national, programmatic, SACSCOC) during the two years previous to the submission of this report. Include a copy of the letter from the USDOE to the institution.

None.

6. Relationship to the U.S. Department of Education.

Texas A&M University does not have any limitations or suspensions, nor have we been terminated by the U.S. Department of Education in regard to student financial aid or other financial aid programs during the previous three years. We are not on reimbursement nor do we have any other exceptional status in regard to federal or state financial aid.