

**California State University Fullerton
Online Education and Pollak Library Support**

WHITE PAPER

**Suellen Cox, Head of Instruction and Information Services Pollak Library
Susan Tschabrun, Chair Department of Technical Services Pollak Library
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Introduction

According to the Chronicle Research Services report “College of 2020: Students” (2009), the growth of hybrid and online classes is changing the landscape of traditional college education (p. 3). By 2020, “students will be taking up to 60% of their courses entirely online” (p. 5). The question of how to guarantee, promote, and institutionalize student access to library services and materials in the online environment is a critical one. The Academic College and Research Libraries (ACRL), a division of the American Library Association (ALA), in its document, “Standards for Distance Learning Library Services,” has articulated a principle and developed standards to address this issue. The ACRL’s “access entitlement principle” states that

“Every student, faculty member, administrator, staff member, or any other member of an institution of higher education, is entitled to the library services and resources of that institution, including direct communication with the appropriate library personnel, regardless of where enrolled or where located in affiliation with the institution. Academic libraries must, therefore, meet the information and research needs of all these constituents, wherever they may be.”

The Pollak Library embraces this principle in concept. However, to what degree does the Library meet the ACRL Standards for Distance Learning Library Services? Moreover, does the Library receive the campus support to guarantee that the library and research needs of online students are being met, and that access, services and materials are equivalent to those provided traditional students?

The purpose of this paper is to address these questions and some of the various issues surrounding them. In attempting to understand the breadth and depth of the issue of how the library can support online education at CSU Fullerton, the authors identified several specific goals: 1) gain a better understanding of the issues surrounding online education and the current CSUF online environment, 2) gain a better understanding of how the Library can meet existing and evolving library/research needs of students created by the expansion of online education at CSUF, 3) inform and engage librarian subject liaisons, library administrators, and the campus on the issues surrounding library access and services and online education, 4) create a written profile and implement a plan for library support of online courses/programs, and 5) understand and communicate to the campus community any financial implications for the Library inherent in these issues.

In trying to better understand and address these issues, several useful documents were consulted (see Works Cited). Several key campus individuals were also consulted: Mr. Dennis Robinson, Director of Distance Learning; Dr. Dorota Huizinga Associate Vice President Graduate Studies and Research; Mr. Ed Trotter,

Associate Vice President of Undergraduate Programs; and Dr. Chris Renne, Director of the Faculty Development Center.

The Growth of Online Education

According to the “Class Differences: Online Education in the United States 2010” report, during the past seven years “online enrollments have continued to grow at rates far in excess of the total higher education student population, with the most recent data demonstrating continued substantial growth” (p. 2). In 2009, “over 5.6 million students were taking at least one online course.....an increase of nearly one million students over the number reported the previous year” (p. 2). Further, “the twenty-one percent growth rate for online enrollments far exceeds the less than two percent growth of the overall higher education student population.....and nearly thirty percent of higher education students now take at least one course online” (p.2). Early growth in this modality came from two factors: 1) new institutions moving into the online arena, and 2) academic institutions that expanded their existing offerings.

Forecasts

Has the growth in online education peaked? According to “Class Differences: Online Education in the United States 2010”, the answer is essentially no; however, certain segments of the education market continue to grow at a more robust pace than others. For profit institutions that moved early into the online arena are continuing to attract large numbers of online students. This puts pressure on public institutions to compete for these students and increase their online offerings. Private nonprofit institutions report less pressure. The report also indicated that “year-to-year enrollment changes for fully online programs by discipline show most growing, but with a sizable portion seeing steady enrollments.” Interestingly, “all recent growth in online enrollments has come from the growth of existing offerings, not from institutions new to online starting new programs” (p. 4).

The Growth and Current State of Online Education at CSUF

CSUF began offering online courses over ten years ago. As of spring semester 2011, there are a total of four completely online degree programs. According to the August 2009 “Online Learning Business Plan”, over the next few years “the university anticipates initiating 11 distance education degree programs and seven concentrations: 14 of these programs are at the graduate level and four at the undergraduate level. Most of these programs currently exist in face-to-face format but offer several courses online. Five, boldfaced below, graduate degree programs will require new curriculum development” (p. 2).

Adult and Lifelong Learning (M.S.)

Anthropology (B.S.)

Biotechnology (M.Bt)

Business Administration (B.A.)

Economic Education (M.A.)

Environmental Engineering (M.S.)

Gerontology (M.S.)

Human Services (B.S.)

Integrated Marketing Communication (M.S.)

Sociology (B.A.)

Statistics (M.A.)

Education, (M.S.) concentrations: (approved by WASC)

Concentration in Bilingual/Bicultural Education

Concentration in Educational Administration

Concentration in Elementary Curriculum and Instruction

Concentration in Educational Technology

Concentration in Higher Education

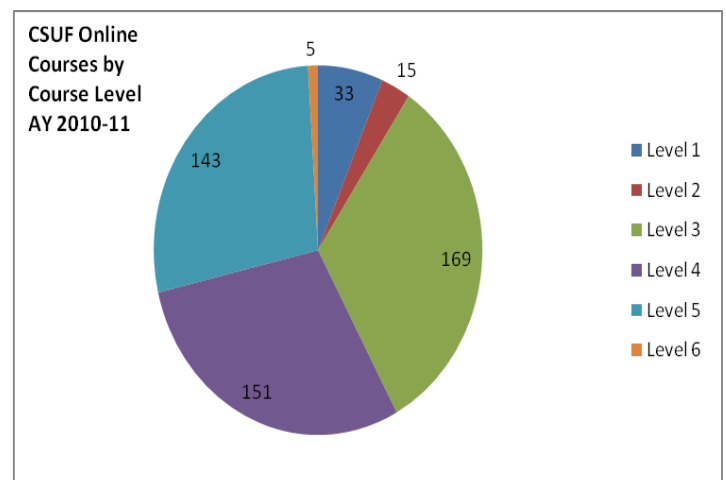
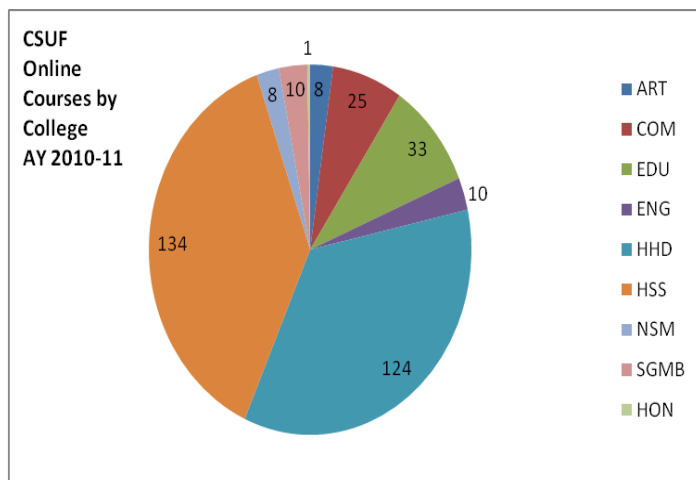
Concentration in Reading

Concentration in Secondary Education

In the current academic year of 2010-11, there were 520 courses offered that were identified as online courses in the CSUF course catalog. Each of these classes went through a campus approval process and were either fully or substantially online. There were 234 such classes in Fall 2010 and 286 classes in Spring 2011. Adding up the number of student enrollments in all these classes gives a figure of approximately 10,000-12,000 online enrollments per semester.

In addition, we have data that indicates the relative participation of the colleges in offering online courses. Topping the list is the College of Humanities and Social Sciences with 134 online courses in AY 2010-11, followed closely by the College of Health and Human Development, with 124 online courses. In terms of the level of course offered online, most online courses were almost equally divided among the 300, 400, and 500 levels.

Since 2003, the number of CSUF students enrolled in at least one online course has grown. In Fall 2003, only 3.4% of all students at Cal State Fullerton were enrolled in at least one online course. By Fall 2010, 21% of our students took one or more online classes, with the figure increasing to 24 % (8377 students) in Spring 2011. By class level, seniors at 39.5% comprise the largest number taking one or more online courses, followed by juniors at 26.1%, graduate/post-baccalaureate at 21.1%, sophomores at 10.2%, and freshman at 3.1%. How many of these students are enrolled exclusively in online courses is not known. (See Appendices I and 2)



CSUF Institutional Context

In consultations with individuals across campus, several issues emerged. First, the 2006 campus document relating to online instruction---UPS 411.104 "Policy on Online Instruction"---will be reviewed and revised by an Academic Senate Ad Hoc Committee during the current year. To provide a library perspective, a faculty librarian has been appointed to serve on this committee. Second, no clear, coherent, cohesive plan with centralized leadership and oversight has been implemented across campus to develop, support, expand, and assess online learning at CSUF. This fact has also been emphasized by WASC, specifically in terms of educational effectiveness. In the 2010 "WASC Report of the Visiting Team Capacity and Preparatory Review", WASC noted that CSUF "does not have a method in place for disaggregating and analyzing distance learning assessment data in comparison to that for classroom-based courses" (p. 38). This lack of overall institutional planning and support is a real concern and one that has also been voiced by Dr. Michael Parker in his document "Strategic Planning Activities 10-08-9-09." He stated, "seeing distance education as secondary to traditional classroom offerings is a misunderstanding of the challenge....if CSUF is to remain in the competition for applicants, it must address the quality and scope of its online coursework" (p. 21). He further states, "Institutions that are the most successful with distance education have a University-wide rather than college or department level of support" (p. 36). The issue of lack of planning and oversight raises several questions for the campus:

- 1) Where does development and ownership of online plans lie?
- 2) Are there any explicit goals to increase the numbers of programs providing online instruction and any estimates of the numbers of students to be enrolled in them?
- 3) Are there any goals or plans for on-line learning that are effectively linked to budget and technology planning?
- 4) Do any current plans for expanding on-line learning (at department or college level) demonstrate the department or college capacity to assure an appropriate level of quality? Shouldn't this be addressed more broadly at the institutional level?
- 5) Is the curriculum for on-line learning offerings coherent, cohesive, and comparable in academic rigor to programs offered in traditional instructional formats?

A failure to address these critical issues makes it difficult for the library to address in a systematic way the library and research needs of students in completely online programs, as well as students taking some online courses.

Implications of WASC Fast Track Approval

Recently, several of our campus proposals for new online programs have been approved via the WASC Fast Track approval process. What is WASC Fast Track? The Fast Track authorization includes the online modality at the Bachelor's and Master's level. Fast Track allows for five years of expedited proposals. Proposals will be reviewed by WASC within 30-45 days. Approval does not require a site visit until the comprehensive review (CPR, EER). Fast Track provides for a significant cost savings of \$250. per proposal rather than \$1000. CSUF was granted approval of our WASC Fast Track proposal in September 2009. Our current Fast Track designation expires October 29, 2013. According to Dr. Dorota Huizinga, currently our designation "lists 12 new and existing degree programs that might submit a request for online modality instruction approval by WASC via Fast Track." She further stated, "After this expiration date, all new online programs and the existing programs proposing to offer their degrees online will be subject to a regular WASC substantive change review." (D. Huizinga, personal communication, March 18, 2011). According to the CSUF

“New Degree Program: Proposal Procedure and Format Offered through Self-Support and State-Support Modes” document, the following applies. A program can be placed on the fast track if: 1) it can be offered within the campus’ existing resource base, or there is a demonstrated capacity to fund the program on a self-support basis; 2) it is not subject to specialized accreditation by an agency that is a member of the Association of Specialized and Professional Accreditors, or it is currently offered as an option or concentration that is already recognized and accredited by an appropriate specialized accreditation agency; 3) it does not require capital outlay project; 4) it is consistent with existing state and federal law and trustee policy; 5) it is a bachelor’s degree or master’s degree program; and 6) the program has been subject to a thorough campus review and approval process.

For the Pollak Library, what is the impact this fast track status? Will it mean large numbers of students taking online classes? Will online classes be offered across many disciplines or concentrated in specific disciplines? Or, will the growth be more modest and mainly in disciplines already offering online education?

Library Support of Online Instruction and Learning

As already mentioned, library professional organizations, especially the American College and Research Libraries Association (ACRL), have been active in developing standards to guide libraries in providing services to faculty and students in online or distance education programs. This effort, which began in 1963 with guidelines for extension students, recently produced “Standards for Distance Learning Library Services,” which was approved on July 1, 2008 by the ACRL Board of Directors. The document is divided into two main sections: “A Bill of Rights for the Distance Learning Community,” which spells out the requirement that libraries must provide “effective and appropriate library services and resources, which may differ from, but must be equivalent to those provided for students and faculty in traditional campus settings.” Part II elaborates in detail the staffing and fiscal requirements that would allow a library to adequately service distance education programs, including the development of long-range goals, needs and outcomes assessment, appropriate collections, services, facilities and equipment, and the necessary collaboration and cooperation with teaching faculty and administrators.

The Pollak Library has been involved in state supported distance learning efforts at Cal State Fullerton for many years before the recent move to web-based online education. The Library has actively supported courses and programs at branch and satellite campuses, in addition to broadcast television and web-based distance education programs, such as Nursing and CalState TEACH, among others. In 2002, Cal State Fullerton offered its first fully online degree program, the Masters of Science in Instructional Design and Technology. A representative from the Library participated in the early planning for this degree and has continued to work with each cohort coming through the program up until the present. About the same time, a Distance Education library team worked to develop policies and procedures that would allow the library to provide services to matriculated students who never physically came to campus. These policies have been in place and have been sufficient to deal with the needs of the small numbers of entirely online students who have been enrolled in existing online programs up until recently. In the case of University Extended Education’s online offerings, the Library has typically distinguished between credit and non-credit courses when deciding how much access to provide students enrolled in UEE courses. However, identity, authorization and authentication issues outside library control have sometimes resulted in barriers for some students.

The institution of the fast track WASC approval process for online programs, together with the gradual but steady move by many individual faculty toward online (as well as hybrid or blended) courses at Cal State Fullerton necessitates careful planning within the library to ensure that there will be adequate support of online instruction as the numbers of students served by that instructional modality increase. On the positive

side, the ability for students and faculty to access library resources and services remotely has never been greater, and the trend in the library toward online delivery continues apace. On the other hand, the shift to electronic modes of delivery has not impacted all disciplines equally and some services provided by the library in a face-to-face mode have not been reconceptualized adequately in an online mode.

Collections

The collections of the Pollak Library have moved substantially online in the last decade, but a few categories of materials still exist largely in physical formats.

a) Online access

Students who obtain access to use the campus portal may utilize any of the library's online resources with a single user name and password.

b) Journals and articles

Serial publications--journals, magazines, and newspapers--are overwhelmingly available online. Out of approximately 68,000 such publications available at the Pollak Library in 2009/10, less than one percent were available exclusively in print.

c) Indexes, abstracts and other reference sources

Most indexing and abstracting services have long ago moved into online database format. The library has also invested wherever possible in electronic reference materials, such as encyclopedias and dictionaries, although there remains significant amounts of reference source material in print format.

d) Books

The Pollak Library held approximately 1.3 million volumes in 2009/10, of which only about 1% were available in electronic format. For disciplines that value currency, such as the sciences, health, and business, the need for books is not as strong as in disciplines such as history, literature, etc. The need to deliver books to online students, especially those in the humanities, will probably decrease but not disappear over the coming years. Growing the number of ebooks the library has will help online programs that make heavy use of book collections.

e) Image and video formats

The library has acquired a number of important image databases in support of art and art history, and there is a growing body of photographic and other image collections freely available on the web. Copyrighted video formats are another issue. Currently, the Pollak Library collects film and video mostly in DVD format, with some older content available only in a variety of obsolescing formats (VHS, laserdiscs, etc.). The library only subscribes to one collection of streaming video, namely Ethnographic Video Online. Until the library acquires more sources of streaming video, online students in programs requiring video content may need DVDs shipped to them.

Services

In addition to collections, online students require the same or, in some cases, enhanced library services compared to students who take classes physically on campus.

a) Interlibrary loan

Online students may require that the library procure resources not available at the Pollak Library

from other libraries. This interlibrary loan service is accomplished through the use of ILLiad, an interlibrary loan software application that manages interlibrary loan requests. In addition to the normal use of interlibrary loan, however, online students sometimes require a similar process to obtain physical items (books, DVDs, or other print-only resources) that the library already owns. Students order this material using ILLiad and receive it either through the US mail or, in the case of articles, scanned and emailed to them. Currently, only students in completely online degree programs can get physical items owned by the Pollak Library sent (or scanned and emailed) to them because of the high costs of the service. In addition to the labor involved in fetching, packaging, scanning, and sending physical items, the Library also pays postage costs one way.

b) Course reserves

Instructors may wish to place books, articles, and other materials on course reserves for use by students in their classes. Currently, course reserves are administered using the Ares software application, which students can access within their Blackboard course sites. Course materials that may be legally reproduced and scanned, for instance articles and individual book chapters, will be accessible to online students, but physical items, such as books and DVDs, will not be available due to the short check out times required by reserves that are meant to be shared by an entire class.

c) Reference

Reference and research consultation services are also needed by online students to the same degree as students that are physically present on campus. Online reference services are well developed at the Pollak Library, and include instant messaging, text messaging and chat reference services that, taken together, are available 24 hours per day, seven days per week. On the other hand, more intensive research consultations, which may be requested online, but take place in person on campus, are not currently available to completely online students. Such consultations would require some type of synchronous web conferencing software, such that the librarian could talk and also show the student resources in real time.

d) Instruction

The Pollak Library has a large and successful information literacy-based instruction program that involves approximately 250 to 300 course sections reaching over 18,000 students per semester. The delivery of instruction is in person and takes place typically in library instruction rooms equipped with desktop computers for each student. There has been some library instruction in an online format (including conferencing using distance education broadcast facilities) for large online programs, such as Nursing. Some online programs, like the MS in Instructional Design and Technology, bring each cohort for library training as part of a larger orientation effort. A few online instructors have requested normal in-person instruction for their classes and invited their students to physically attend such sessions. In general, though, it appears that most instructors teaching online classes do not request sessions, and in fact, synchronous online sessions have rarely if ever been offered outside the facilities provided through UEE/Distance Education.

Challenges to Library Support

The Pollak Library already provides significant support to online programs and courses just by virtue of the fact that it has built digital collections and online services to reach students and faculty at their “points of need,” which may be in the library building, but are equally likely to be in classrooms, homes, and other places students study or faculty teach. Despite the fact that students can interact with the library from remote locations, there remain points of access that still rely on students coming to the library building. When those student-library intersections involve physical items or face-to-face services, there will be extra costs associated with delivering those items or services to online students. Depending on the costs, the Library may find it necessary to limit or otherwise control how much is spent providing these special services to online students. There are several key challenges that the Pollak Library faces when attempting to serve students in online courses and programs.

- Identification of online students

One crucial question is how to define which online students need special accommodation, and then find a way to authorize and authenticate them. The most cut-and-dried cases are students enrolled in cohort-based degree programs that are delivered 100% online. These students in theory should never need to come to campus, and many will live too far to travel to the library for any purpose, except perhaps as part of a mandated in-person program orientation session. There are other types of online programs that may have a mix of students earning credits in both online and face-to-face courses, coming to campus for some classes and working online in others. Many students may be enrolled in an occasional online course, or a hybrid course that does not bring them on campus very often. There are two issues at stake. First, how can the campus identify which students are enrolled in 100% online programs or courses? Secondly, which accommodations (such as mailing books, or scanning print journal articles) can the library afford to provide to different types of online students in an era of cost cutting?

- Faculty awareness of library support in an online environment

Educating faculty about library resources and services available to them and their students--a difficult task in a traditional environment--becomes even more challenging as faculty move their courses online. Even faculty who integrated library resources and services into their curriculum may assume, rightly or wrongly, that there is no online equivalent for their 100% online students, even though the library has in many cases been proactive in developing ways to deliver or embed services in online environments.

- Continued reliance on physical formats in some disciplines

An increasing number of disciplines have moved decisively into digital forms of publishing, but there remain disciplines that either still make heavy use of older content, mainly in book format and/or remain reliant on publishers that have not moved into electronic publishing. To be fair and effective, the library would require significantly enhanced resources in order to serve upper division or graduate level research projects in these print-dependent disciplines, either through purchasing more e-content, or subsidizing delivery of physical items.

- Cost recovery for online-related expenditures in the library

In an era of budget cutting, the Library is less able than ever to respond quickly and appropriately

to the needs of new online programs. Whether it involves moving content into online formats, or funding special services to deliver physical items or services to participants in online courses and programs, the library will sometimes need enhanced revenue to adequately support new online programs, and the costs of these accommodations will vary among disciplines.

- Accessible Technology Initiative

It goes without saying that any development of online content or services must be designed and developed to be 508 compliant.

Recommendations

The Pollak Library delivers many of its collections and services in ways that serve online students equally well as traditional students. However, there remain gaps in the full suite of services available to online students that should be remedied. To arrive closer to meeting the ACLR standard of providing online students with “effective and appropriate library services and resources, which may differ from, but must be equivalent” to normal services, the authors believe that the following recommendations should be addressed:

a) Needs assessment and ongoing outcomes assessment

As already mentioned, the ACRL *Guidelines for Distance Learning Library Services* recommends that libraries regularly survey distance learning students “to monitor and assess both the appropriateness of their use of services and resources and the degree to which needs are being met and skills acquired.” Such data gathering should initially take the form of a needs assessment from which a written profile of needs would be compiled. Thereafter, the Library should conduct regular assessments to determine how well students are acquiring information literacy skills and the degree to which library collections and services are meeting online learners’ needs.

b) Librarian and staff training and support

To meet the need for new services, or new modes of delivery of existing services, librarians and library staff will require access and training in new technologies useful for delivering information, services, and library instruction to online students. Examples include web conferencing software that will allow synchronous group or individual meetings between students, faculty and librarians, video capture and captioning programs, software to create interactive online tutorials, options for embedding library content in the learning management system, etc. In most cases, these applications will be standard software available to the campus at large, but there will be occasions when the library will need to invest in specialized technology for a library-specific objective.

c) Faculty outreach

Subject librarian liaisons should endeavor to work with departments as they work out the details of new online degree programs so that the kinds of support that the library can provide the new program, and associated costs, if any, are well understood by the department. In addition, librarian liaisons should work closely with individual faculty teaching online courses to help them understand how they can get maximum benefit from library services and collections in the online environment. Where feasible, representatives from the library should work with IT, Distance Education, and University

Extended Education (UEE) to get a library presence in the learning management system (e.g. Moodle) and other key systems where library collections and services might be useful. The library should systematically publicize its online-friendly services to the campus, and work with the Faculty Development Center, OASIS, and the Academic Technology Center to offer training to faculty where necessary. Toolkits, checklists, and other helpful aids should be developed so that faculty designing an online course can quickly assess where their need for library resources and services fit into their course design, and how those needs can best be met in the online environment.

d) Student outreach

Although the most effective outreach to online students may be through their faculty and departments, the Library also should strive to mitigate any possible barriers to student use of library collections and services independently. Clean, simple website design, the deployment of easy-to-use resource discovery interfaces, the provision of online assistance throughout the website, good integration into the learning management system, and targeted use of social media are only a few of the methods we can use to assist students to make good use of the library even though they may never enter the library building. The library should find a way to identify and contact students entitled to the special services available to 100% online students, such as delivery of physical items, so that they are aware of any benefits for which their online status qualifies them.

e) Recovery of costs

Serving a growing number of 100% online students with library resources and services equivalent to traditional students can place a burden on the library at a time when funds are scarce. Some equivalent services, such as the mailing or scanning of physical items, may be labor intensive and therefore costly. At the same time, the need for such services is to some degree discipline-specific. The library should research the average supplemental costs associated with serving 100% online students by broad discipline or college and work to recover those costs where possible. The campus levies a distance education fee, which subsidizes other costs associated with serving online students, and the needs of the library should be factored in when setting the dollar amount for that fee, if possible.

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Appendix (1) 2011 Spring Course List

| Course | # of Students Enrolled |
|----------|------------------------|
| AFRO311 | 89 |
| AFRO356 | 73 |
| AMST101 | 105 |
| AMST301 | 317 |
| ANTH100 | 43 |
| ANTH101 | 45 |
| ANTH102 | 44 |
| ANTH103 | 85 |
| ANTH300 | 63 |
| ANTH301 | 46 |
| ANTH304 | 104 |
| ANTH305 | 84 |
| ANTH308 | 44 |
| ANTH315 | 43 |
| ANTH321 | 40 |
| ANTH325 | 36 |
| ANTH327 | 36 |
| ANTH342 | 41 |
| ANTH350 | 39 |
| ANTH414 | 36 |
| ANTH424 | 38 |
| ANTH481 | 29 |
| ART 499 | 27 |
| ASAM308 | 37 |
| ASAM320 | 53 |
| ASAM325 | 49 |
| BIOL101 | 86 |
| BIOL280R | 14 |
| BIOL299L | 12 |
| BIOL300 | 40 |
| BIOL360 | 51 |
| BIOL480 | 62 |
| BIOL499L | 44 |
| BIOL580 | 8 |
| BIOL598 | 1 |
| BIOL599 | 8 |
| CAS 312 | 142 |
| CAS 340 | 81 |
| CAS 394L | 15 |
| CAS 474L | 6 |
| CAS 496 | 1 |
| CAS 499 | 6 |
| CHEM480A | 7 |
| CHIC496 | 7 |
| CHIC499 | 1 |
| CHIN299 | 2 |
| COMM233 | 119 |
| COMM310 | 50 |
| COMM361 | 50 |
| COMM407 | 34 |
| COMM447 | 16 |
| COMM449 | 17 |
| COMM496 | 2 |
| COMM517 | 15 |
| COMM597 | 9 |
| COUN380 | 13 |
| COUN584 | 6 |
| COUN597 | 7 |
| CPRL110 | 124 |
| CPRL347B | 51 |

| | |
|----------|-----|
| CPRL458 | 14 |
| CPSC543 | 73 |
| CPSC545 | 77 |
| CPSC546 | 51 |
| CPSC597 | 42 |
| CRJU300 | 45 |
| CRJU492 | 8 |
| ECON315 | 43 |
| ECON333 | 60 |
| ECON335 | 73 |
| ECON495 | 6 |
| EDAD501A | 2 |
| EDAD501B | 2 |
| EDAD501C | 2 |
| EDAD567 | 64 |
| EDAD568 | 16 |
| EDAD597 | 57 |
| EDAD599 | 2 |
| EDD 670B | 12 |
| EDD 670E | 13 |
| EDD 698 | 34 |
| EDEL438 | 64 |
| EDEL439 | 199 |
| EDEL452 | 21 |
| EDEL453 | 127 |
| EDEL511 | 53 |
| EDEL512 | 53 |
| EDEL515 | 18 |
| EDEL518A | 37 |
| EDEL518B | 37 |
| EDEL522 | 18 |
| EDEL529 | 70 |
| EDEL552 | 19 |
| EDSC304 | 80 |
| EDSC310 | 70 |
| EDSC320 | 203 |
| EDSC330 | 98 |
| EDSC340 | 91 |
| EDSC410 | 52 |
| EDSC440S | 33 |
| EDSC449E | 28 |
| EDSC449I | 54 |
| EDSC504 | 16 |
| EDSC522 | 31 |
| EGCE597 | 1 |
| ENGL301 | 27 |
| ENGL331 | 29 |
| ENGL355T | 22 |
| ENST595T | 19 |
| GEOG100 | 116 |
| GEOG110 | 74 |
| GEOG120 | 42 |
| GEOG160 | 41 |
| GEOG340 | 45 |
| GEOG345 | 44 |
| GEO1310T | 71 |
| GEO1535T | 7 |
| GERO133 | 26 |
| GERO443 | 7 |
| GERO450 | 5 |
| GERO503 | 20 |
| HCOM461 | 35 |
| HCOM499 | 2 |

| | |
|----------|-----|
| HCOM599 | 1 |
| HESC101 | 165 |
| HESC325 | 45 |
| HESC342 | 173 |
| HESC349 | 35 |
| HESC350 | 135 |
| HESC358 | 165 |
| HESC401 | 34 |
| HESC410 | 45 |
| HESC450 | 38 |
| HESC455 | 35 |
| HESC494 | 127 |
| HESC550 | 23 |
| HESC558 | 29 |
| HUSR201 | 35 |
| HUSR310 | 35 |
| HUSR311 | 48 |
| HUSR315 | 24 |
| HUSR318 | 36 |
| HUSR380 | 23 |
| HUSR396 | 30 |
| HUSR396L | 45 |
| HUSR400 | 37 |
| HUSR412 | 33 |
| HUSR430 | 35 |
| HUSR434 | 36 |
| HUSR440 | 35 |
| HUSR470 | 36 |
| HUSR475 | 31 |
| HUSR495 | 36 |
| HUSR495L | 31 |
| HUSR496 | 36 |
| HUSR496L | 36 |
| IDT 520 | 24 |
| IDT 525 | 24 |
| IDT 550 | 20 |
| IDT 597 | 20 |
| ISDS265 | 119 |
| ISDS361B | 39 |
| ISDS550 | 24 |
| ISDS552 | 24 |
| ISDS553 | 11 |
| ISDS556 | 25 |
| ISDS577 | 25 |
| KNES300 | 27 |
| KNES342 | 129 |
| KNES349 | 27 |
| LING430 | 27 |
| MAED449E | 1 |
| MAED449I | 1 |
| MATH491 | 10 |
| MATH497 | 12 |
| MATH599 | 13 |
| MKTG351 | 28 |
| MKTG353 | 26 |
| MLNG495 | 10 |
| MLSC302 | 1 |
| MUS 307 | 106 |
| MUS 356 | 10 |
| MUS 408J | 10 |
| MUS 408N | 10 |
| MUS 426 | 10 |
| NURS300 | 28 |

| | |
|----------|-----|
| NURS302 | 24 |
| NURS307 | 79 |
| NURS320 | 59 |
| NURS353 | 69 |
| NURS355 | 19 |
| NURS400 | 42 |
| NURS402 | 42 |
| NURS402L | 43 |
| NURS406L | 12 |
| NURS407L | 22 |
| NURS412L | 47 |
| NURS450 | 60 |
| NURS452L | 8 |
| NURS501 | 19 |
| NURS505A | 18 |
| NURS505B | 28 |
| NURS507 | 41 |
| NURS507L | 39 |
| NURS508 | 33 |
| NURS508L | 33 |
| NURS515A | 37 |
| NURS524 | 27 |
| NURS526 | 26 |
| NURS597B | 28 |
| PHYS301 | 25 |
| POSC402 | 37 |
| POSC493 | 12 |
| POSC498 | 11 |
| POSC499 | 1 |
| POSC503 | 5 |
| POSC599 | 2 |
| PSYC300 | 60 |
| PSYC305 | 72 |
| PSYC305L | 40 |
| PSYC331 | 97 |
| PSYC495 | 83 |
| PSYC496 | 38 |
| PSYC498 | 9 |
| PSYC598 | 8 |
| PSYC599 | 8 |
| READ290 | 123 |
| READ501 | 23 |
| READ507 | 34 |
| READ508 | 27 |
| READ514 | 29 |
| READ520 | 24 |
| READ536 | 27 |
| READ570 | 6 |
| RTVF100 | 133 |
| RTVF350 | 22 |
| SOCI101 | 132 |
| SOCI133 | 15 |
| SOCI302 | 77 |
| SOCI303 | 170 |
| SOCI306 | 31 |
| SOCI308 | 76 |
| SOCI341 | 87 |
| SOCI351 | 97 |
| SOCI352 | 65 |
| SOCI354 | 103 |
| SOCI356 | 65 |
| SOCI357 | 123 |
| SOCI360 | 73 |

| | |
|---------|-------|
| SOCI381 | 61 |
| SOCI410 | 70 |
| SOCI443 | 37 |
| SOCI458 | 40 |
| SOCI495 | 21 |
| SOCI503 | 2 |
| SPED371 | 133 |
| SPED401 | 132 |
| SPED421 | 72 |
| SPED429 | 47 |
| SPED462 | 10 |
| SPED463 | 31 |
| SPED464 | 33 |
| SPED490 | 46 |
| SPED502 | 50 |
| SPED504 | 33 |
| SPED529 | 38 |
| SPED531 | 14 |
| SPED532 | 28 |
| SPED533 | 64 |
| SPED535 | 19 |
| SPED551 | 43 |
| SPED584 | 33 |
| SPED599 | 2 |
| THTR364 | 11 |
| THTR375 | 22 |
| THTR464 | 5 |
| THTR497 | 17 |
| THTR499 | 7 |
| THTR566 | 1 |
| VIET499 | 2 |
| WMST100 | 93 |
| WMST205 | 61 |
| WMST302 | 40 |
| WMST308 | 5 |
| WMST499 | 7 |
| Total | 12358 |

Appendix (2) 2010 Fall Course List

| Course | # of Students Enrolled |
|----------|------------------------|
| ACCT597 | 18 |
| AFRO311 | 98 |
| AFRO356 | 61 |
| AFRO430 | 15 |
| AMST101 | 75 |
| AMST301 | 190 |
| AMST596 | 4 |
| AMST599 | 6 |
| ANTH100 | 38 |
| ANTH101 | 39 |
| ANTH102 | 38 |
| ANTH103 | 38 |
| ANTH300 | 78 |
| ANTH301 | 36 |
| ANTH304 | 79 |
| ANTH305 | 62 |
| ANTH315 | 37 |
| ANTH321 | 39 |
| ANTH327 | 70 |
| ANTH340 | 29 |
| ANTH342 | 40 |
| ANTH344 | 40 |
| ANTH350 | 48 |
| ANTH480 | 24 |
| ANTH481 | 40 |
| ANTH499 | 7 |
| ANTH598 | 20 |
| ART 495 | 50 |
| ART 499 | 31 |
| ASAM320 | 25 |
| ASAM325 | 34 |
| BIOL101 | 95 |
| BIOL299L | 13 |
| BIOL480 | 30 |
| BIOL499L | 29 |
| BIOL580 | 16 |
| CAS 312 | 145 |
| CAS 394L | 140 |
| CAS 464L | 32 |
| CAS 474L | 95 |
| CAS 494L | 34 |
| COMM233 | 164 |
| COMM310 | 31 |
| COMM407 | 39 |
| COMM449 | 22 |
| COMM495 | 158 |
| COMM496 | 3 |
| COMM499 | 7 |
| COMM598 | 4 |
| COUN511 | 16 |
| CPRL110 | 86 |
| CPRL270T | 28 |
| CPRL347A | 43 |
| CPSC541 | 53 |
| CPSC542 | 72 |
| CPSC544 | 56 |
| CPSC547 | 77 |
| CRJU300 | 100 |
| ECON315 | 35 |
| ECON333 | 63 |

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|----------|-----|
| EDAD505A | 14 |
| EDAD563 | 19 |
| EDAD567 | 33 |
| EDAD597 | 29 |
| EDD 698 | 28 |
| EDD 699 | 11 |
| EDEL511 | 89 |
| EDEL512 | 19 |
| EDEL515 | 51 |
| EDEL523 | 20 |
| EDEL590 | 37 |
| EDEL594 | 29 |
| EDSC304 | 58 |
| EDSC307 | 17 |
| EDSC310 | 73 |
| EDSC320 | 144 |
| EDSC330 | 80 |
| EDSC340 | 74 |
| EDSC410 | 31 |
| EDSC506 | 16 |
| EDSC550 | 9 |
| EDSC591 | 20 |
| EGCE597 | 4 |
| ENGL301 | 27 |
| ENGL402S | 21 |
| ENGL498 | 29 |
| ENST599 | 1 |
| GEOG100 | 74 |
| GEOG110 | 75 |
| GEOG120 | 35 |
| GEOG160 | 37 |
| GEOG340 | 38 |
| GEOG345 | 35 |
| GEOL310T | 35 |
| GERO133 | 71 |
| GERO425 | 10 |
| GERO443 | 14 |
| GERO450 | 5 |
| GERO501 | 30 |
| HCOM461 | 26 |
| HESC101 | 158 |
| HESC325 | 42 |
| HESC342 | 141 |
| HESC349 | 33 |
| HESC350 | 66 |
| HESC358 | 114 |
| HESC401 | 54 |
| HESC410 | 36 |
| HESC450 | 35 |
| HESC455 | 29 |
| HESC558 | 37 |
| HIST596 | 10 |
| HIST599 | 3 |
| HONR497 | 1 |
| HUSR201 | 29 |
| HUSR310 | 32 |
| HUSR311 | 41 |
| HUSR315 | 33 |
| HUSR385 | 33 |
| HUSR396 | 54 |
| HUSR396L | 89 |
| HUSR400 | 37 |
| HUSR430 | 32 |

| | |
|----------|-----|
| HUSR434 | 34 |
| HUSR440 | 30 |
| HUSR445 | 19 |
| HUSR470 | 33 |
| HUSR495 | 29 |
| HUSR495L | 130 |
| HUSR496 | 32 |
| HUSR496L | 57 |
| IDT 505 | 27 |
| IDT 510 | 27 |
| IDT 525 | 17 |
| IDT 540 | 21 |
| IDT 545 | 30 |
| ISDS265 | 76 |
| ISDS361A | 36 |
| ISDS405 | 28 |
| ISDS418 | 27 |
| ISDS551 | 27 |
| ISDS553 | 37 |
| KNES300 | 31 |
| KNES342 | 89 |
| KNES349 | 64 |
| LING597 | 6 |
| MATH497 | 8 |
| MKTG351 | 23 |
| MLNG495 | 9 |
| MUS 356 | 5 |
| NURS300 | 21 |
| NURS320 | 21 |
| NURS355 | 21 |
| NURS355L | 21 |
| NURS400 | 53 |
| NURS402 | 70 |
| NURS402L | 63 |
| NURS450 | 29 |
| NURS501 | 81 |
| NURS505A | 29 |
| NURS508 | 19 |
| NURS508L | 19 |
| NURS511 | 49 |
| NURS513 | 28 |
| NURS514 | 24 |
| NURS530 | 31 |
| NURS532 | 25 |
| NURS597A | 48 |
| PHIL302 | 1 |
| PHYS301 | 18 |
| POSC493 | 22 |
| PSYC300 | 63 |
| PSYC305 | 72 |
| PSYC305L | 36 |
| PSYC331 | 73 |
| PSYC430 | 21 |
| PSYC495 | 39 |
| PSYC496 | 30 |
| PSYC498 | 13 |
| PSYC499 | 1 |
| PSYC598 | 9 |
| PSYC599 | 4 |
| READ290 | 121 |
| READ501 | 24 |
| READ507 | 20 |
| READ508 | 24 |

| | |
|--------------|--------------|
| READ520 | 40 |
| READ570 | 8 |
| RTVF100 | 146 |
| RTVF350 | 20 |
| SCED554 | 2 |
| SOCI101 | 129 |
| SOCI302 | 72 |
| SOCI303 | 87 |
| SOCI305 | 41 |
| SOCI308 | 46 |
| SOCI309 | 42 |
| SOCI351 | 185 |
| SOCI352 | 48 |
| SOCI354 | 58 |
| SOCI356 | 45 |
| SOCI357 | 45 |
| SOCI360 | 35 |
| SOCI371 | 56 |
| SOCI381 | 41 |
| SOCI443 | 41 |
| SOCI495 | 15 |
| SPED371 | 192 |
| SPED401 | 152 |
| SPED421 | 42 |
| SPED429 | 77 |
| SPED434 | 16 |
| SPED462 | 57 |
| SPED463 | 72 |
| SPED464 | 40 |
| SPED490 | 46 |
| SPED502 | 45 |
| SPED504 | 34 |
| SPED529 | 72 |
| SPED531 | 17 |
| SPED532 | 27 |
| SPED533 | 45 |
| SPED535 | 7 |
| SPED551 | 60 |
| SPED584 | 60 |
| SPED599 | 6 |
| THTR364 | 22 |
| THTR375 | 41 |
| THTR464 | 4 |
| THTR588A | 2 |
| WMST100 | 115 |
| WMST205 | 74 |
| WMST302 | 81 |
| Total | 10505 |

