

The pulling power of Marquee courses: the changing curriculum and quality reference services

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Abstract

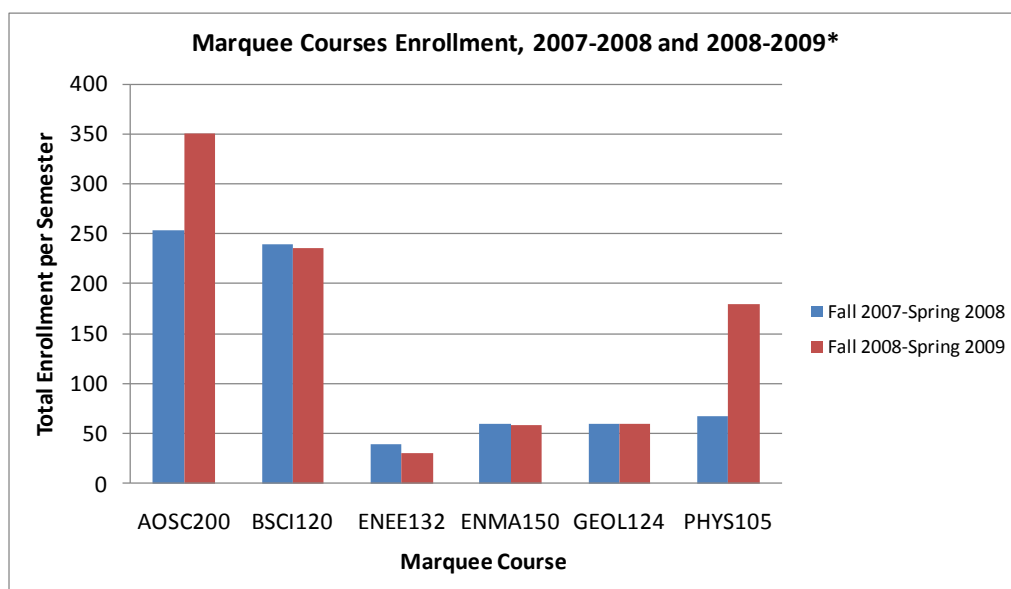
University curricula are showing signs of customization, interdisciplinarity, and relevance to current events. The University of Maryland's (UM) 2007-2008 Strategic Plan states the University's intention to revise the concept of traditional undergraduate Core courses to a General Education Program that more heavily emphasizes lifelong learning, global perspectives, and interdisciplinary study. The Marquee Courses in Science and Technology (Marquee Courses) at the University of Maryland is an innovative, cross-colleges program that endeavors to demonstrate the relevance of science and technology to non-sci/tech majors by integrating science and technology with environmental, global, and social issues. The Marquee Courses program is already making strides toward the changes envisioned in the Strategic Plan. This paper will explore the ways in which librarians at the Engineering and Physical Sciences Library (EPSL) have undertaken efforts to address the Strategic Plan's goal for UM Libraries to adapt their services and resources for students conducting twenty-first-century research and studying disciplines that were once viewed as separate. EPSL librarians have begun taking steps in this direction by proactively marketing library resources and services for the Marquee Courses, interacting with Marquee coordinators and professors, and providing reference instruction for individual courses. EPSL Librarians have connected with program coordinators to understand the makeup of the program and to advocate for the integration of the Libraries into its functions. In making themselves more than "visible" to Marquee professors and program coordinators, librarians are demonstrating their services and resources as relevant to an increasingly independent and "online" user community of undergraduate students.

Keywords: reference, undergraduates, instruction, interdisciplinary

Did You Say "Marquee" Course?

The title of this paper bears a little explanation. The Oxford English Dictionary defines "marquee" to mean "[a] tent large enough to hold many people," and further, "a canopy projecting over the main entrance to a building" like that of a movie theater, "on which details of the entertainment or performers are displayed" [Marquee, n.d.]. The concept of "marquee value" is derived from this advertising of performers or movies and shows performed at a particular venue—the pulling power that draws in the audience. We liked this idea for characterizing the unique effects of the Marquee Courses in Science and Technology in operation at the University of Maryland, College Park (UM)—and this paper will discuss not only how undergraduates are being drawn into these courses, but will also examine the influence this program has had on our own approaches to bibliographic instruction at UM's Engineering and Physical Sciences Library (EPSL).

The Marquee Courses program at the University of Maryland is singular in offering a variety of interdisciplinary undergraduate courses in science, technology and mathematics. Spanning the A. James Clark School of Engineering, the College of Chemical and Life Sciences, the College of Computer, Mathematical and Physical Sciences as well as the Office of Undergraduate Studies, Marquee Courses brings together math, technology and the sciences with contemporary issues and social science approaches, creating relevant and interesting core courses for non-sci/tech majors [Marquee Courses, n.d.a]. The program's learning objectives for students include critical thinking, the ability to evaluate information sources, relate science to current events and issues, and develop effective oral and written communication skills [Marquee Courses, n.d.b].



*ENEE132 (previously titled ENEE189W) not offered Fall 2007/2008; ENMA150 and GEOL124 not offered Spring 2008/2009; PHYS105 not offered Fall 2007

Source: University of Maryland, Testudo (n.d.b) (<http://www.testudo.umd.edu/ScheduleOfClasses.html>)

The program came into being in 2007 and already boasts high enrollment numbers. Repeated high enrollment suggests the success and appeal of these courses to the non-sci/tech majors for whom they were created. Past semesters have shown all of the Marquee Courses offered to be at or near capacity by the end of the registration period [University of Maryland, n.d.b]. In December 2008, the University of Maryland's student newspaper featured an article about the Marquee Courses. Dean of Undergraduate Studies Donna Hamilton reported a 48% increase in enrollment in the classes for Fall 2008 from the spring. One student was quoted as saying the courses " 'are not necessarily easier [than traditional sci/tech cores], but are easier to pay attention to' " [Eckard, 2008, para. 4]. Hamilton goes on to say that the program aims to provide awareness of the roles science and technology play in all areas of society, and work to show the relevance of students' education to their daily lives. Another student noted that " '[n]ow, when I walk outside, I know not just what the weather is, but why the weather is how it is' " [Eckard, 2008, para. 6]. This relevance can keenly inspire and indeed creates a foundation for lifelong learning; what is taught in the classroom does not end when the class or the course is over.

These courses also attempt to relieve some of the anxiety that can accompany the math and science requirements of the core undergraduate curriculum. Courses like **AOSC 200: Weather and Climate**, **PHYS 105: Physics for Decision Makers: The Global Energy Crisis**, **BSCI 120 The Insects: Pollinators in Crisis**, and **GEOL 124: Biogenesis: Making a Habitable Planet** examine environmental issues important not only to science but also important to the students and the world both politically and economically. These courses encourage students to question current policies and their own attitudes and beliefs in their everyday lives. **ENMA 150: The Materials of Civilization** and **ENEE 132: Engineering Issues in Medicine**¹ look at various ways science and technology intersect with law and ethics. All of these courses require critical thinking and emphasize global perspectives in anticipating the next steps for science and technology. The stress on critical thinking and analysis highlight the Marquee Courses program's intention of giving students not just course knowledge, but foundations for lifelong learning. A stronger relevance to students' daily lives acknowledges a need and desire for the practical applicability of university education important to today's students.

The Marquee Courses program was first brought to the attention of EPSL librarians in 2007 when it was first getting off the ground. It was through already existing faculty relationships and consistent marketing tactics that brought EPSL librarians into contact with the faculty members who would be teaching these "Marquee Courses." Further contact with each of the professors participating in the program garnered us reference sessions for three of the six classes offered in Fall 2007. Our

¹ Formerly titled ENEE189W

eagerness to be involved with the Marquee Courses program was simple—a new program of interdisciplinary core courses would undoubtedly bring new challenges and opportunities for bibliographic instruction classes—not only for content and approaches to the sessions themselves, but also for our marketing efforts. A similar change in the undergraduate curriculum had occurred the year before, a change that affected the freshman introductory engineering course and resulted in a loss of a number of reference sessions that EPSL had regularly handled. This major change only a year ago encouraged us to take a vested interest in the Marquee Courses program, in order to understand and anticipate any changes that the program may have in store for our regular bibliographic instruction.

Curriculum Changes and Bibliographic Instruction: Keeping Up and Keeping Relevant

In a December 2008 article, Ann Smith describes Marquee Courses as relevant, experiential, and interactive. “Taking the role of scientists,” Smith notes, “students in Marquee courses are expected to work in teams, communicate, discuss, and struggle with real problems that truly affect their lives. They are expected to communicate their findings with presentations, reports, and poster sessions” [Smith, 2008, p. 4]. Smith further proposes that the Marquee Courses program is one that which may provide a model for all core classes, merging theory and practice across disciplines: “as scholars and researchers we all work at the edge of our disciplines, creating new knowledge and bringing new insights to our fields, and Marquee courses expect students to understand the edges of our knowledge, places where our disciplines are going” [Smith, 2008, p. 5].

The Marquee Courses program represents a forward-thinking trend toward the changes anticipated by the University of Maryland’s 2007-2008 Strategic Plan. In February 2008, the University of Maryland’s student newspaper, *The Diamondback*, reported that the committee charged with revamping the core curriculum had its first meetings [Austin, 2008]. The Strategic Plan emphasizes the need to expand on and further develop the university’s core curriculum to ensure students’ successful negotiation within the university environment as well as in the global environment [University of Maryland, 2008a, p.25]. While traditional disciplinary studies will obviously continue, new developments will include an emphasis on applying multiple areas of study, critical and integrative thinking, and current social perspectives [University of Maryland, 2008a, p. 26]. The Strategic Plan further calls for tenured and tenure-track faculty members to teach the newly designed general education courses [University of Maryland, 2008a, p.27]. Innovative teaching techniques, smaller class sizes and a greater emphasis on writing, with the draw of talented faculty [University of Maryland, 2008a, p.27], will aim, then, to encourage undergraduates in their studies from the very first courses, the foundational courses, that ideally provide them with the breadth and well-rounded nature of a liberal arts education.

The proposed General Education courses at UM would attempt to build from the beginning of undergraduate study courses whose content and goals are complementary. The Plan’s goals actually echo several aspects of the Student as Scholar (SAS) paradigm outlined by Hodge et al. in 2007. Briefly, the Student as Scholar paradigm focuses on a foundational shift from teaching and learning to “emphasiz[ing] inquiry with no boundaries” [Hodge et al., 2007, p.1]. The Student as Scholar model, argues Hodge et al., expands on the innovations of the previous Discovery Paradigm (that focused on teachers encouraging students’ learning and discovering) in several ways: by incorporating learning into all aspects of life, in- and outside of the classroom; by breaking down traditional disciplinary borders; and by allowing students to become a true part of the scholarly community with real contributions of their own [p.4]. It was due to an increase in access to information and the rapid progression of technology that has allowed SAS to become a possibility for undergraduate core curricula today [Hodge et al., 2007, p.4]. More independent and interdisciplinary study and greater access to tools and resources combine to create what Hodge calls the “ ‘fusion of learning’ ” [Hodge et al., 2007, p. 4] across the curriculum.

The UM Libraries play an essential role in the future of the University as an innovative institution, a role that is acknowledged and highlighted by the Strategic Plan. The Plan places the Libraries at the heart of information access necessary to quality research, education and teaching [University of Maryland, 2008a , p.37]. A major part of the Libraries’ as well as the University’s mission, is to engage students in a process of lifelong, independent, and well-informed research and learning [User Education Services, 2009]. Not only is the amount of information increasing and becoming more and more difficult to navigate, but the sources and avenues of access are also changing; instruction classes allow librarians to demonstrate their own and the library’s relevance to students and to faculty in real time as they explain and demonstrate services and resources. As undergraduate education evolves, so must the library’s involvement with undergraduate bibliographic instruction. The changes taking place in undergraduate curricula as a whole will indicate a need for academic libraries to

continually revise reference instruction sessions and maintain and perhaps even increase marketing efforts. Harun and Koh Ping Hoon of Nanyang Technological University presented in 2006 the inextricable relationship between quality and useful bibliographic instruction content and the evolution of the undergraduate curriculum [p.11-12]. They note that as the larger “educational landscape” evolves, becomes more global and interdisciplinary as well as more competitive, university curricula are becoming more flexible, requiring much more of students than before, in the way of critical thinking, teamwork, independent thought, and technological know-how [p.11].

Creating Interdisciplinary Reference Instruction Sessions

Some Issues

Reference instruction makes up a significant portion of the information literacy initiatives utilized at the UM Libraries. Course-specific reference instruction further places librarians in direct contact with professors and students, in the classroom setting. One-shot sessions will be the focus of this section and typify the type of course-specific sessions EPSL offers. In 2007, EPSL librarians taught a total of 68 bibliographic instruction classes; and for 2008, we counted 106 sessions. Through the marketing efforts to be described in more detail later, we obtained several sessions for Marquee Courses. Quite often, too, Marquee professors would combine several of their sections for a single reference session, creating one large session for us. The chart below shows an increase in the number of Marquee Courses we acquired between the program’s first year and the beginning of its second year in Fall 2008. We were able to obtain sessions for four of the five courses offered in Fall 2008. As of this writing, we have so far secured one session for Spring 2009 (ENEE132).

Marquee Course	Fall 2007	Spring 2008	Fall 2008
AOSC200	--	--	--
BSCI120	--	--	X
ENEE132 (189W)	Not offered	X	Not offered
ENMA150	X	Not offered	X
GEOL124	X	Not offered	X
PHYS105	Not offered	--	X

X = Session(s) taught

Creating a reference instruction session for interdisciplinary science and technology courses that incorporate elements of the social sciences can be challenging. Laurie Kutner (2000) examines some of the issues related to reference instruction with an interdisciplinary course in environmental science at the University of Vermont. Although her article focuses on sustained instruction, her methods are more than applicable for one-shot sessions. Kutner acknowledges the difficulties of approaching interdisciplinary study for students and scholars alike when information sources have traditionally been classified and organized along disciplinary lines [Kutner, 2000, para. 6]. The Library of Congress Classification (LCC), for example, makes physical and virtual OPAC browsing difficult for interdisciplinary researchers, who would need to consider the various classes into which their topics could fall [Kutner, 2000, para. 8]. Such limitations of the LCC for searching library catalogs, according to Kutner, necessitate instruction in creative keyword generation and Boolean relationships [para. 9]. Database searching, too, requires the same kind of flexibility in technique, particularly when moving between multidisciplinary and subject-specific databases [Kutner, 2000, para. 14].

A Typical Session

Kutner’s points about the basic nature of information resources emphasize the challenges presented to the one-shot reference session for an interdisciplinary course. It is a basic assumption today that most students are going to use and are going to want to use electronic journals and databases, and it

is the norm in the sciences for the most up-to-date information. It is incumbent upon us in bibliographic instruction sessions to demonstrate the tips and tricks of the electronic resources, and our sessions for Marquee Courses tend to focus more heavily on journals and databases, not only for their emphasis in the sciences, but also for the currency of the social issues many of the courses address. What will follow is a brief rundown of a typical reference session for a Marquee Course.

A typical session is team-taught by two EPSL librarians. We are proponents of team-teaching in that it allows for two sets of expertise and two sets of opinions [Zdravkovska, 2008]. We bring to interdisciplinary courses like Marquee the understanding of the relevant scientific resources with which the non-sci/tech majors who take these courses are not familiar. A significant benefit of team-teaching for us includes pairing librarians and graduate assistants with less teaching experience with those who have more, which makes for hands-on training sessions.

Most of our sessions, whether for graduates or undergraduates, begin with either an introduction to or review of basic services and information found on the UM Libraries' main web page (www.lib.umd.edu). From this page, patrons can easily access information about the Libraries, including the locations of our eight branches and their hours, Interlibrary Loan (ILL) services, research guides, and the various ways to contact librarians. Depending on time constraints, we may demonstrate a sample search within the University System of Maryland and Affiliated Institutions (USMAI) consortial catalog, explaining the regular and journal searches, but the particular functions of requesting books within the catalog are gone over to let students know there are ways to obtain the items they need.

As mentioned above, a reference session for a Marquee Course will focus on electronic journals and databases—choosing appropriate sources, accessing them, and negotiating their interfaces. Most sessions given by EPSL librarians tend to focus on the UM Libraries' portal for electronic resources, Research Port. Research Port offers 24/7 access to our databases and electronic journals. We demonstrate ways in which students can check for journal subscriptions (both print and electronic) as well as search for articles for which they have full citations. Our databases are divided by discipline, and during almost all bibliographic instruction sessions we demonstrate both interdisciplinary and subject-specific databases. Given the difficulty undergraduate students can have choosing a database for their topics, interdisciplinary databases can be both an excellent starting point and a powerful resource. As research among scholars and down to the student researcher level becomes increasingly interdisciplinary, research methods must become more flexible, and researchers must become more savvy. By using a social lens to examine science and technology, Marquee Courses utilize the interdisciplinarity very much present in twenty-first century scholarship. Marquee Courses present us with an interesting challenge and a look ahead at the type of interdisciplinary curricula many undergraduate core courses may adopt at the University of Maryland as the General Education Program evolves [Zdravkovska, 2008]. The usefulness of multidisciplinary databases like Academic Search Premier, a resource we show to students of all levels and disciplines for its broad scope and full-text offerings, cannot be overestimated. Subject-specific databases are chosen within broadly defined categories of engineering, physical sciences, mathematics and computer science. Currently, Marquee Courses generally fall into either engineering or the physical sciences. For engineering-based classes, like **ENMA150: The Materials of Civilization** and **ENEE132: Engineering Issues in Medicine**, we offer Compendex as the main go-to database, while for physical sciences, it is Web of Science. Within Web of Science, we find it important to demonstrate the Cited Reference Search feature, particularly as it will show students which articles are foundational and will give them ideas how to utilize bibliographies for finding further resources. Keeping in mind, of course that Marquee Courses include a social sciences component, we may also show ERIC, Medline, or Lexis-Nexis Academic, depending on time constraints and on the professor's wishes. We may also discuss citation and style guide resources. One resource that is beginning to receive more attention in our reference sessions at all levels is Google Scholar. Google Scholar is quickly becoming a valuable resource—searching a wide variety of resources from institutional repositories to patents to Google Books, it finds full text articles while also indexing and abstracting much of what appears in subscription databases, particularly in engineering and the sciences. Patrons can log into Google Scholar via UM's Research Port, allowing proxy access to UM Libraries' electronic holdings. Where applicable, Google Scholar links to these articles and books made available through our electronic journal and database subscriptions, as well as the online catalog. When used in conjunction with library holdings, Google Scholar is demonstrated as a powerful and useful database that students and faculty use and want to use. Demonstrating Google Scholar allows us to demonstrate the continued need for and relevance of library resources at the same time.

Marquee Courses Program and EPSL: Taking Steps Together

The marketing library services only becomes more of a necessity in the face of quickly changing resources, interfaces and even citation standards. In 1999, Gloria Leckie and Anne Fullerton examined the tendencies of science and engineering professors to utilize the library in their courses. Their findings showed less of a need for library instruction for lower level science and engineering courses, as they focus more on discipline-specific theories and practices, most often taught directly from course textbooks [Leckie & Fullerton, 1999, p.22]. At the same time, however, Leckie and Fullerton also found a (perhaps somewhat common) lack of knowledge of library services on the part of the professors, demonstrating an apparent need for marketing tactics [Leckie & Fullerton, 1999, p.20]. However, one can surmise that as the general education courses begin to change at the University of Maryland, even these disciplinary core courses may take on more outside influences, much like the Marquee Courses, as Ann Smith (2008) suggests.

It is thanks to the aggressive and pointed marketing tactics on the part of EPSL librarians for obtaining reference sessions for the Marquee Courses and our involvement with the program. EPSL librarians took it upon themselves to "sell" library sessions to individual professors, creating and maintaining strong faculty relationships, which, as discussed above, had been the means by which we initially came to the Marquee Courses program. We have also recently met in 2008 with program administrators to discuss ways in which we could further incorporate the Libraries into the structure of the program in the future and, more immediately, how we can work together to emphasize the benefits of bibliographic instruction sessions for individual courses. As discussed above, the program is quite popular, and the Libraries, and EPSL in particular, to a previously untapped section of the student population (non-sci/tech majors), benefit from the exposure [Zdravkovska, 2008]. EPSL's involvement with the Marquee Courses program has brought us not only the benefit of the instruction session within the Program, but also offers us the opportunities to attract new courses, based what we have learned from marketing library services to this particular population [Zdravkovska, 2008]. The Marquee Courses Program anticipates creating new courses for future semesters, and EPSL librarians will continue to pursue current and new Marquee Courses.

Conclusions

To return to the title of this paper, perhaps we can add a little more to the notion of "pulling power." The Marquee Courses Program in Science and Technology draws in students who ordinarily would not be exposed to bibliographic instruction in engineering and the sciences; spans several schools within the University of Maryland; and has also drawn in the attention and collaboration of UM librarians for its forward-thinking pedagogy.

The main significance of EPSL's involvement with the Marquee Courses program is that this program is showing us some possibilities of what the General Education program may hold for the future of undergraduate education at the University of Maryland. Library instruction will in the future become increasingly more interdisciplinary, less bound by the restrictions of traditional subject studies and bibliographic instruction that too will be more influenced by interdisciplinary resources.

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