

Indiana Partnership for Statewide Education
Course Development Grant

Ball State University

Complementary and Alternative Health Modalities: An Offering for Multidisciplinary Students

Abstract

Complementary and Alternative Health Modalities: An Offering for Multidisciplinary Students and Health Care Consumers, NUR 201, is a complete online 2 hour credit-bearing course for undergraduate students in all disciplines. The course will be offered during a 16-week semester, with students engaging in learning activities for 2-3 hours per week. The course focus is on the introduction to complementary and alternative health methods of therapy through essential concepts of holistic healing, including the philosophical basis and information about various healing therapies for society at large. There is not an elective course on this topic offered exclusively online in Indiana that is offered for students of all disciplines.

As many as 70% of the United States health consumers use some form of complementary or alternative medicine (CAM), such as herbal therapies, massage, and meditation for chronic conditions and diseases such as cardiovascular disease, diabetes and arthritis. This is significant to the course due to its emergence as an area of interest driven by consumer demand that is now being widely researched for its safety and efficacy in treating chronic conditions and diseases. Schools of medicine and nursing around the country and the world are including CAM in their curriculums. Federal scientific research has been increasing in the National Institutes of Health through the National Center for Complementary and Alternative Medicine (NCAAM). Private scientific research of the mind-body connection is increasing through observational, physiologic, epidemiological, and clinical research lines. Students of all disciplines are seeking reliable CAM information based on research to become informed about the increasing variety of health care choices offered today.

This online course will potentially expand general education offerings, meet the needs of professional competence for nursing students, and bring CAM information to the many interested non-nursing students. Ultimately this course could address workforce issues of health promotion and contribute to the wellness of geriatric and chronic disease populations through web technology. The amount requested from IHETS for the development and delivery of this course is \$15,000 with \$17,280 matched by the institutional funds of Ball State University.

Narrative

1.) Market Analysis (Need, Audience, and Demand)

The **market demand** for complementary and alternative medicine (CAM) information is evident. According to the Indiana Healthcare Ethics Network, as many as 146 million United States health care consumers already use some form of CAM, and most of them are paying out-of-pocket. Complementary and alternative methods of treatment are becoming more accessible, and health care consumers are using such things as herbal therapy, nutrition, and relaxation techniques successfully in treating chronic conditions such as pain, cardiovascular disease, and stress. Schools of nursing and medical schools throughout the country are providing CAM courses to their students to prepare them for public demands of CAM evidence-based practice. Students of all disciplines are seeking research-based CAM information to learn about the increasing variety of choices for health and healing offered in today's society. The prevalence of the use of CAM in the United States demonstrates that there is a demand for more CAM education for students of all disciplines.

The target audience includes college students across all disciplines. The **potential target audience** for the course includes nursing and non-nursing students in the undergraduate programs either on campus or at a distance. Undergraduate students who can potentially be interested in an online elective CAM course would be traditional and nontraditional students of many disciplines such as Gerontology, Humanities, Sports Studies, Women's Studies, Family and Consumer Sciences, Physical Education, Music, Art, Theater and Dance, Social Studies, Physiology and Health Science, Social Work, Sociology, Speech Pathology and Audiology, and Counseling and Guidance.

A projection of the number of learners who will likely enroll in the offering each year can potentially be hundreds. Ball State University already has 60 students who have expressed interest in the online course. BSU can offer the course 4 semesters per year (including 2 summer sessions), estimating 240 students per year within the university. As students from other disciplines interested in the course begin to enroll, hundreds more will be included in this estimate. This course can follow the Medical Terminology course, previously funded by IHETS, that has grown to include 600 BSU students of all disciplines enrolled annually. The size of **the target population** could include large numbers of Hoosier multidisciplinary college students who will have access to the course from all IPSE universities.

The proposed audience can be reached with a **modest targeted marketing effort** through state-wide advertising by Ball State University, local and national publications on health care and education, online marketing, faculty presentations at conferences, and university recruiting career fairs. Surveys conducted in the fall of 2002 of faculty at the Wellness and Gerontology Center at Ball State University, practicing nurse practitioners, and department chairs at BSU indicate that they will refer students to a health care course on the topic of CAM.

A review of course offerings throughout the Indiana College Network and the IHETS consortium of colleges and universities revealed no CAM courses that were offered completely online, and none targeted students of all disciplines. A review of 60 websites on five major search engines on the topic of CAM courses revealed that there were no online courses for students of all disciplines. This proposed project does not duplicate any course currently listed on major search

engines. This CAM course addresses compelling statewide needs in the area of health, client safety, and professional and general education offerings for students of all disciplines.

2.) Instructional Design and Delivery Plan

Overall Structure of Course

The credit bearing course focuses on an introduction to complementary and alternative health modalities through essential concepts of holistic healing, including the philosophical basis and information about various healing modalities for society at large. The course contents are as follows: the history of the complementary and alternative health modalities in the U.S., influence of global cultural values in complementary and alternative health modalities, various complementary and alternative health modalities, and application of complementary and alternative health modalities for various health problems.

Types of Online Learning Materials and Rationale

Online learning materials for this course will include the following: Web modules, online quizzes, asynchronous conference assignments, written assignments submitted electronically, web links to appropriate learning sites and learning resources, and asynchronous discussions about course content and applied activities. Specifically, digital learning materials will include video streaming from videos produced by the Public Broadcast System on CAM (permission has been obtained to use them free of charge), still digital photos with voice overlay, tutorials, interactive exercises with Flash animation and audio, electronic educational games and surveys, and electronic quizzes with learning feedback loops. The **rationale** for selection of delivery technologies is that the information technologies used to support Web-based learning environments promote active learning for students, enable rich and rapid feedback, establish access to a wide variety of learning resources, and promote interaction among students and faculty.

Planned instructional techniques and strategies and explanation of how they will foster achievement of instructional goals in conjunction with online content

The course will be structured to be offered during a typical semester during which participants will complete modules both independently and asynchronously. Students will participate in a rich environment with a range of learning activities including asynchronous discussions, online learning activities, and knowledge development through the use of the instructional techniques. For example, the course will begin with a module that is designed to allow the student to investigate his/her own health belief system based on a health belief model. A digital self-test about attitudes toward conventional and CAM methods will be accessible from the first module which will give the student a score indicating various health beliefs within his/her belief system. Each student will then post an asynchronous discussion with introductory information about him/herself, what their beliefs about conventional medicine and CAM are, what experiences they have had with CAM, and what they believe others in society feel about the CAM movement. Each student will respond to another so that interaction takes place between students and between students and the course instructor.

Other examples of instructional techniques and strategies in successive modules include the following: (1) At the beginning of each module there will be opportunities for students to view introductory CAM educational video clips by clicking on to the topic of discussion for that module. (2) In another module, students will be learning about acupuncture and the “anatomy” of what is called the “meridians” for therapeutic effects. The student will access an interactive exercise to learn the effects of acupuncture on the meridians which affect various parts of the human anatomy. (3) The students will be required to write a midterm paper about a chosen CAM modality, and an educational tutorial will be available to help the student to write in the required format according to the American Psychological Association. (4) Electronic quizzes will be accessed after each unit of study. The quizzes will have learning feedback loops which will provide the student with areas that he/she answered incorrectly, so that the learner may return to the specific content in the book to learn it more thoroughly.

Types of formal and informal opportunities of interaction and collaboration among students and between students and the instructor

Active learning will take place with electronic interactions between students and students and between students and the instructor through online discussions and e-mail communication. The instructor will provide written feedback on the midterm paper submitted for the course requirements. The students can access the instructor and be guaranteed a response within 24 hours through the course website or institutional e-mail. Office hours at the instructor’s office for face-to-face conferences can also be arranged if requested by the students.

Explanation of how the course design and materials serve the particular educational needs and learning styles of the target audience

The educational needs of traditional and nontraditional undergraduate college students will be met through the course by completing the modules and learning activities described above. Because the target audience will include all disciplines, many learning styles will be evident among the students. The variety of the learning activities within the web modules will provide an opportunity for students with different learning styles to engage in the ongoing process of cognitive development. This is enhanced with frequent assessment of students’ abilities and appropriate feedback to students that is inherent in the online learning environment described in the web modules of this course.

3.) Institutional Capacity and Commitment

The growth of Ball State University’s commitment to the advancement of communication technologies in distance education has been evident in the development of leadership in quality higher education that extends the university and its resources to individuals and organizations throughout the state and the nation. Goals of BSU’s Strategic Plan include the innovative use of instructional and information technology to enhance teaching and learning experiences in addition to broadening, diversifying, and enriching its relationships beyond the campus. The School of Nursing, University Computing Services, and the Teleplex support this project and are committed to providing consultation for effective teaching and learning technology applications, development of pedagogical practice to support various technological applications, and participating in

team-based development that provides needed specialized technological resources for the project. The School of Nursing leads the university in the number of online courses (25), programs (RN Completion and 4 Graduate Tracks), and research in the evaluation of online teaching and learning. The course will be made available and supported each semester through the School of Nursing as evidenced by the extensive requests to the Director of the School of Nursing from students of all disciplines who feel as if CAM is applicable to their studies.

4.) Utilization Potential

How the offering fits into Ball State University and consortium of Indiana institutions

This credit-bearing course fulfills the need for students of all disciplines to be informed health care consumers with the variety of choices that are available today. The course will have approximately 240 BSU students within the first year that it is offered, and can be made available to all universities in the consortium of Indiana institutions, allowing all college students in the state to have access to it.

Commitments and Recommendations

Trinity College has inquired about a commitment to utilize a module assignment by engaging in asynchronous online discussions with students from BSU about the topics of CAM and cultural diversity. Please see Appendix B for letters of support from Dr. Kent Bullis, Medical Director, Ball State University; Dr. John Peterson, Integrative Health Specialist; Rhonda Miller, Family Nurse Practitioner and Integrative Health Specialist; and Dr. Kathy Segrist, Associate Director and Gerontology Program Director of the Fisher Institute for Wellness and Gerontology, Ball State University.

MERLOT

The author and the School of Nursing are willing to submit individual digital learning objects from the course to the MERLOT (Multimedia Educational Resource for Learning and Online Teaching) repository.

5.) Marketing Plan

The course will be advertised on the Ball State University School of Nursing web home page. Oral publicity will be initially through BSU students of all disciplines as well as nursing students who will benefit from this course or web modules. Faculty will market the course at state, regional, and national health care conferences. Written promotion for the CAM course will be completed through local and national publications on health care and education. BSU alumni will be contacted through alumni events and newsletters for graduates.

6.) IHETS Evaluation Plan

Formative and summative evaluations of the course and individual modules will be performed through the combined efforts of the BSU School of Nursing, internal reviewers, and University Computing Services. The School of Nursing and Teleplex have proven experience and expertise in evaluating online courses with a record of over three years of online distance education evaluation. Internal reviewers will consist of expert online educators in addition to on-campus and distance college students. Beta testing will be completed for the entire course by technology experts, educators, and

college students to provide feedback that will give information about the effectiveness of the course, design, presentation, comprehensibility, accuracy, and usability.

7.) IHETS Project Schedule

June-July, 2003	Select team members. Identify concepts to be enhanced with multimedia assets. Develop introductory content. Plan and develop digital learning materials with team members such as video streaming, still digital photos with voice overlay, tutorials, interactive exercises, electronic educational games, and electronic quizzes with learning feedback loops.
Aug.-Dec. 2003	Development of learning activities and multimedia assets for improvements.
Jan-May, 2004	Beta testing by target population reviewers, internal health educator peer reviewers, instructional design faculty, and technological experts. Initiate marketing through mailings to alumni, and online marketing to students of all disciplines.
June, 2004	Offer course online to multidisciplinary student population. Formative and Summative evaluations. Digital object(s) / module(s) available via the BSU websites and/or MERLOT. Final report to IHETS.

8.) Key Development Personnel

Janet Phillips, Project Director, is an Instructor at Ball State University School of Nursing with expert knowledge of online teaching and learning in higher education. She has experience in designing, implementing, and teaching Internet courses for nursing students as well as students of all disciplines. She has 25 years of nursing experience with expert knowledge of the needs of health care consumers. A team will be formed for the purposes of course development with faculty from the Teleplex, University Computing Services, Learning Resource Center in the School of Nursing, and internal consultants with online teaching expertise in the School of Nursing (see Appendix A for other key project personnel).

Budget Narrative

The Project Director will devote over half of her workload to developing the course during the summer of 2003 and academic year 2003-2004. The two other faculty team members will have 4% and 2% of release time to work on the project respectively and this time will be cost shared. Both team members will assist with the design and development of materials as well as review and pilot test developed modules. Student assistants from the Learning Resource Center will be requested for \$2,675 for integrating digital components and technical revisions during beta testing and initial use. Fringe benefits are calculated at 7.65% for the Project Director. Both of the faculty team members' fringe benefits are calculated at 32% (cost shared). Stipends of \$75 are requested to pay five persons who will review and beta test the course. Marketing costs will total \$754 which will include written promotion. Teleplex personnel will develop the multimedia learning activities. The Teleplex technical development assistance requested is \$10,953, all of which will be cost shared by Ball State University.

Appendix A

Key Development Personnel

Janet M. Phillips, MS, RN is an Instructor at Ball State University School of Nursing and is currently teaching 2 Internet courses for students of all disciplines. She received her Bachelor of Science from DePauw University in 1978. From 1999-2002 she was a Master of Science student at Ball State University with a major in nursing education. She completed clinical rotations in a complementary and alternative therapy setting, V.A. Hospital, Senior Health Care Center, and I.U. Medical Center in Indianapolis. She received her Master of Science from Ball State University in May, 2002, in the Nurse Educator Track, with an emphasis on Internet teaching and learning. She was inducted into Sigma Theta Tau, the Honorary Society of Nursing, April, 2001. Mrs. Phillips worked as a professional Registered Nurse in a variety of adult health care settings from 1978-1995. She was a Practical Nurse educator from 1995-1999. Her research experience includes being a research participant for a study of online learning, and a research proposal was written for the evaluation online learning in nursing education. She served as a reviewer for two Internet courses for Indiana University School of Nursing during the fall semester, 2002.

Other Key Development Personnel:

Kay Hodson Carlton, Ed.D., RN, FAAN, is Professor and Coordinator of Educational Resources & Extended Education Services for the School of Nursing at Ball State University in Indiana. From her early authorship of one of the first computer assisted programs in nursing to her involvement with national information databases and online education, Kay has been a leader for over twenty years in developing and managing

creative and effective applications of educational resources and technology for the benefit of nursing. She is Associate Editor for Educational Informatics for Computers in Nursing, serves as an Editorial Advisor for Nurse Educator, and is the Co-Editor for the Health Science MERLOT project. Kay was elected a fellow in 1997 to the American Academy of Nursing for her innovative work with technology design, development and implementation in nursing.

Linda L. Siktberg, PhD, MSN, RN, is the Director of the School of Nursing and Assistant Professor at Ball State University in Muncie Indiana. She has been with Ball State University for 19 years, holding positions in all of the nursing programs. Her publications include many research studies about technology in nursing education, including designing courses for the Internet and evaluating computer-assisted instruction. Her creative endeavors include videotapes for safe swallowing and computer programming. She has received three funded external grants from the Indiana Commission for Higher Education. She is presently the President Elect for the Beta Rho chapter of Sigma Theta Tau International Honor Society of Nursing.

Appendix B

See paper copies of letters of support from the following:

Dr. Kent Bullis, Medical Director, Ball State University

Dr. John Peterson, Integrative Health Specialist

Rhonda Miller, Family Nurse Practitioner and Integrative Health Specialist

Dr. Kathy Segrist, Associate Director and Gerontology Program Director of the Fisher Institute for Wellness and Gerontology, Ball State University.