INDIANA UNIVERSITY SOUTH BEND
UNDERGRADUATE COURSES
Curriculum Change
(New Course Requests / Course Change Requests / New Program Requests)

CAMPUS ROUTE SHEET

DIVISION/UNIT/DEPARTMENT: College of Health Sciences / Dental Education

CHANGE REQUESTED: New course N 390

SIGNATURES

Dept/Unit Chair: [Signature] Date: 1/25/10

Unit Curriculum Committee Chair: [Signature] Date: [ ]
(if applicable)

Dean/Assoc Dean: [Signature] Date: 1/29/10

Director of General Education Committee Chair: [Signature] Date: 1/29/10
(if applicable)

Senate Curriculum Committee Chair: [Signature] Date: 4/15/10

Assoc Vice Chancellor Academic Affairs: [Signature] Date: 5/31/10

July 2008
New Course Request

1. School/Division: Dental Education/NHP
2. Academic Subject Code: OHYG
3. Course Number: N390 (must be cleared with University Enrollment Services)
4. Instructor: H. Quimby
5. Course Title: Health Promotion and Disease Prevention in Costa Rica

6. First time this course is to be offered (Semester/Year): Summer 2010 (if approved) Summer 2011
7. Credit Hours: Fixed at 3 or Variable from to
8. Is this course to be graded S-F (only)? Yes ☑ No
9. Is variable title approval being requested? Yes ☑ No
10. Course description (not to exceed 50 words) for Bulletin publication: This course will provide students the opportunity to travel abroad to San Jose and Shireles, Costa Rica, to provide preventive dental care to a population in need.

11. Lecture Contact Hours: Fixed at or Variable from 20 to 24
12. Non-Lecture Contact Hours: Fixed at or Variable from 20 to 24
13. Estimated enrollment: 10-15 of which 0 percent are expected to be graduate students.
14. Frequency of scheduling: Every Year Will this course be required for majors? Gen Ed
15. Justification for new course: All students need Common Core for BDS/TH
16. Are the necessary reading materials currently available in the appropriate library? YES.
17. Please append a complete outline of the proposed course, and indicate instructor (if known), textbooks, and other materials.
18. If this course overlaps with existing courses, please explain with which courses it overlaps and whether this overlap is necessary, desirable, or unimportant.
19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of the new course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by:

Judith M. Schafner
Department Chairman/Division Director

Date: 1/25/10

Approved by:

Margaret Johnson
Dean

Date: 2/8/10

Chancellor/Vice-President

Date: (required)

University Enrollment Services

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UPS 724

University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White
Proposal for
THE NATURAL WORLD
a Common Core course of the IUSB General Education Curriculum

NAME: Quimby
Last

Kristyn
First

R.
Initial

Dental Education/College of Health Sciences
Department/Division

Course title: The Natural World – Health Promotion and Disease Prevention in Costa Rica

First Semester to be offered: Summer Session II 2010

Instructions: Attach a course description and sample syllabus. Please respond briefly to each question in the space provided. The syllabus will provide primary data regarding the suitability of the course as a version of The Natural World. Use the comment section to clarify, expand, and/or guide the reviewer through your syllabus.

Section A of this form addresses general characteristics of all Common Core courses. Section B is specific to The Natural World. Feel free to repeat any information that fits in both areas.

A. GENERAL CHARACTERISTICS OF Common Core COURSES

Briefly discuss ways in which the course meets the expectations listed below. Details of these expectations can be found at http://www.iusb.edu/-gened/GenEd_RepRec.pdf

1. How does the course include instruction in at least one of the fundamental literacies (writing, speaking, critical thinking, quantitative reasoning, computer literacy, information literacy, visual literacy)?

Methods of instruction will fulfill at least three of the fundamental literacies: writing, speaking, and critical thinking. This course helps students develop an appreciation for Latin American culture while immersing them in a Spanish language program and developing clinical treatment skills for health care. Health care focuses primarily on fundamental scientific knowledge and reasoning. Students need to draw upon inductive and deductive reasoning, critical thinking skills in relation to the administration and delivery of health care, and evidence based decision making. Initially, each student will read “The Costa Rica Reader” and a book on the indigenous populations of Costa Rica which both focus on Costa Rican history and society. Students will write a one page single spaced essay on the reading answering a question about life in Costa Rica. They will also read articles focusing on Costa Rican society and health care and respond with a one page essay. This will allow them to apply critical thinking skills and writing skills based on their reading and analysis of the material. While in Costa Rica they will focus on developing Spanish speaking skills by speaking with their host families, faculty, and patients in a dental clinic. Lastly, they will use quantitative reasoning while in the dental clinic determining the best course of care for patient’s oral and overall health. They will need to rely on their scientific reasoning by applying a basis for evaluation of each patient, describing any outcomes or limitations of treatment, and finally being able to provide care to each patient. This will require the ability to have sound knowledge in current technologies within health care and knowledge of limiting health factors and current medical conditions with each patient. Students will be analyzing the medical data on the patient’s health history, their chief concern, and collecting current data in the form of measuring oral and general health (dental charting, periodontal charting, and oral hygiene indices).
2. In what ways is the course interdisciplinary?

This course has a social science component focusing on culture in Latin America. It also has a humanities component in the readings assigned focusing on the history of Costa Rica. Finally and most importantly, it has a scientific component with students providing oral health care to an indigenous population of Costa Rica under the supervision of IU South Bend faculty and local dentists from Costa Rica.

3. What ethical issues will be addressed in the context of course material, and how will the course include instruction in what constitutes ethical and unethical responses to these issues?

Students will face ethical challenges in culture while taking this course. This course will be a challenge for some students to embrace another culture, and provide competent care to patients that may be vastly different than the students. The course will include information about culture shock and ways to overcome it. The course will have two orientations, prior to beginning the course and one upon arrival in the host country. Students will have the ability to ask questions, obtain answers, and become familiar with their surroundings and legal parameters to help develop solutions to ethical issues.

Students may also be exposed to ethical clinical dilemmas. For example, there may not be enough time to provide the type of extensive care patients may need in a dental clinic setting. This is no different than the United States, and students will be assisted by faculty handling this type of situation. In most cases, the patient will be given another appointment to finish treatment. In the event that the student will not be available to complete care other arrangements will be made with local doctors and dentists. They will provide care based on the code of Ethics of the American Dental Hygienist’s Association and the IU South Bend’s dental hygiene clinic Patient’s Bill of Rights.

Any other ethical issues that may come up during the first offering of this course will be included in future course offering orientations.

B. SPECIFIC CHARACTERISTICS OF The Natural World

In response to the questions below, consider the ways in which the course meets the stated objective for The Natural World:

This core course will introduce students to the methods and logic of science and help students understand the importance of science to the development of civilization and to the contemporary world. It will serve to provide a context within which to evaluate the important scientific and technological issues we face in modern society.

1. Describe the “lab, measurement, observation, or field component” of the course.

Students will participate in a clinical dental setting during the second week of the course for four hours a day, assessing oral health, developing and implementing treatment plans, and evaluating the outcome of care. They will rely on their knowledge from their current dental education which will prepare them to use critical thinking, inductive and deductive reasoning, and data collection and analysis. They will use oral hygiene indices, dental charting of current oral conditions, periodontal charting and recording, gingival analysis and description, periodontal diagnosis and treatment planning based on the level of disease present, and administering care based on these findings. Post treatment evaluations will also be conducted on patients to analyze the outcome of care and compare it to the anticipated outcome of care from the treatment plan. If further treatment is needed it will be provided based on the data collected. Students will apply their scientific analysis skills in all aspects of this clinical experience.
2. How will aspects of historical development and social context of the content be addressed?

Students will read two books focusing on the indigenous population of Costa Rica and the history of Costa Rica. These will provide a rich history of the traditions of the indigenous peoples including their health care beliefs, their religious practices, their food consumption, and their views on family. This will assist students when treating the patients in the clinical setting to understand their patients more thoroughly and treat the patient from a cultural standpoint as well as a scientific medical standpoint.

Students will also read journal articles about the universal health care system in Costa Rica. Costa Rica health care is known as one of the best in Latin America. Students will begin to understand the amount of care that is provided in many of the major cities in Costa Rica, and then draw on this knowledge for comparison when they travel to the very rural area of Shiroles.

3. Describe how students will be required to find, evaluate, and interpret scientific information.

During the clinical time, students will have to evaluate the assessment data gathered on each patient individually and decide on a course of treatment unique to each person. Assessment data will be collected in the form of charting current dental conditions, existing restorations and decay, periodontal (gum tissue) health, bone levels, radiographic evidence of disease, and the patients overall chief concern (what brought them to the clinic). They will use their critical thinking skills and apply evidenced based decision making based on parameters of care from the American Academy of Periodontology and the American Dental Association to come up with a treatment plan based on the patient’s assessed disease status and potential for a good/fair prognosis.

4. Describe how the course will help students to understand what constitutes a scientific approach to problems and the nature of proof.

Students will need to rely on their previous knowledge gained in their respective program to formulate a traditional hypothesis for treatment, carry out their proposed course of action based on their analysis of the data, and then measure the outcome. With the outcomes, they will be able to have a clear idea on the nature of proof for their hypothesis. They will do this step by step with each patient they treat. It will by nature be reinforced each time they see a patient.

5. How will the course illustrate connections between topics and emphasize the application of scientific principles to new situations or current events?

By reading texts on the history of Costa Rica, and the history and beliefs of the indigenous people of Costa Rica, students will have a great fundamental knowledge to utilize when they begin collecting oral health care data and treating patients.

Students will most likely begin to see patterns emerging in the health care of the patients in this indigenous population, whether they are related to diet, pregnancy, prevention, or current health care strategies. For example, the indigenous peoples, in the area of the clinic where students will be treating patients, drink ‘chicha’ at most ceremonies and community events. This is a highly cariogenic (cavity causing) drink due to the sugar and alcohol content. Students may see many patients that have severe cavities due to this local practice or custom. As these types of patterns begin to emerge students will be able, with the assistance of faculty, draw conclusions and help further their knowledge in providing culturally competent dental care to patients. The data collected and knowledge gained can be applied to patients they will treat in their health care careers in the United States. They will be able to apply their reasoning skills, critical thinking, and cultural awareness while treating patients in the US, especially with the Latin American population continually growing in our country.
6. How will the course introduce students to the concept of change in the physical world?

Health care is part of the changing world. With universal health care coverage being a hot topic in the United States right now, this experience will offer an enriching view of a country that has had universal health care for years. Students will be able to draw on the journal articles and in-country experiences to make conclusions on what works in universal systems and what could be improved in them.

The knowledge that health care providers possess is based on current information that we can analyze and interpret. This knowledge changes according to new information that gets presented in the scientific community. Students will be introduced to this type of change in various ways in this course. One fundamental aspect of change they will witness is the role culture plays in dentistry for the people of Costa Rica. This is a concept that is currently emerging in the United States for health care in general, but has long been a tradition in Latin American health care. Students will read a book on specific medicinal and herbal plants and then go on a tour of a medicinal garden where many home remedies in Latin American culture are founded. They will then be able to apply some of this knowledge while treating patients in the indigenous community. Students will also be able to use their knowledge of Western medicine and blend it with the acquired knowledge from the Latin American health care system to formulate new ideas, concepts and knowledge; which has been shown to bring about change in the physical world of health care.
Health Promotion and Disease Prevention in Costa Rica
H344 Summer Session II (3 credit hours)
July 10th 2010 - July 25th 2010

Course Instructor:
Kristyn Quimby
Office: Riverside 145
Email: krirhawk@iusb.edu

Course Description and Goals:
This course will provide students the learning opportunity to travel abroad to San José and Shiroles, Costa Rica and provide preventive health care to a population in great need. Students will live with Costa Rican families immersing themselves in the culture of the country and learning to speak Spanish for application in medical and dental settings. Students will be given the opportunity to apply what they have learned about the dynamics of the Costa Rican healthcare system by assisting a dentist in a community clinic sponsored by Caja Costariccense (Costa Rican Social Security) which serves a largely indigenous population.

Goals of this course will be focused on applying scientific reasoning and gathering of current oral health care data to aid in developing a deeper understanding of Hispanic culture and its indigenous roots in regards to medicine and treatments, and to providing treatment based on these findings to a population in need.

Course Rationale:
The World Health Organization has identified the need for an oral health program in many of the developing nations as well as the lower-middle to upper middle class communities in developed nations, (WHO, 2008). “High relative risk of oral disease relates to socio-cultural determinants such as poor living conditions, low education; lack of traditions, beliefs and culture in support of oral health. Communities and countries with inappropriate exposure to fluorides imply higher risk of dental caries and settings with poor access to safe water or sanitary facilities are environmental risk factors to oral health as well as general health. Moreover, control or oral disease depends on availability and accessibility of oral health systems but reduction of risks to disease is only possible if services are oriented towards primary health care and prevention. In addition to the distal socio-environmental factors, the model emphasizes the role of intermediate, modifiable risk behaviors, i.e. oral hygiene practices, sugar consumption (amount, frequency of intake, types) as well as tobacco use and excessive alcohol consumption. Such behaviors may not only affect oral health status negatively as expressed by clinical measure but also impact on quality of life.” Taken from http://www.who.int/oral_health/strategies/content/en/print.html accessed on September 8, 2008.
Course Competencies:
Students enrolled in this course will:

1.5 Provide humane and compassionate care to all patients, respecting individual and cultural diversity.

3.1 Provide accurate, consistent, and complete documentation for assessment, diagnosis, planning, implementation and evaluation of dental hygiene services

4.1 Obtain, review and update a complete medical and dental history, including an assessment of vital signs as indicated.

4.2 Identify medical conditions that require special precautions or consultation prior to or during dental hygiene treatment.

4.3 Perform a comprehensive examination using clinical, radiographic, periodontal, dental charting, and other data collection procedures to assess the patient's needs.

4.4 Analyze and interpret the assessment data to formulate a dental hygiene diagnosis.

5.1 Formulate goals and establish expected outcomes related to the dental hygiene diagnosis using a patient centered approach.

5.2 Obtain the patient's informed consent based on a thorough case presentation.

6.1 Utilize approved infection control procedures.

7.1 Determine the outcomes of dental hygiene procedures using indices, examinations, and patient self-report.

8.4 Provide dental hygiene services in a variety of settings.

8.5 Respond to personal, patient/client or community requests for information about dental concerns or issues.

9.1 Identify the health needs of individuals and assist them in the development of appropriate and individualized self-care plans.

9.2 Encourage patients to assume responsibility for their health and promote adherence to self-care plans.

9.3 Utilize effective written, verbal and non-verbal communication skills.

Program Description and Overview:
The program involves language immersion with special experiences in Hispanic culture and medicine. During the program, the students will be living with local families gaining a personal introduction to the warmth and friendliness of Costa Ricans. In addition students will provide dental care and will also be able to participate in cooking, Latin dance classes, and special tours including herbal medicine gardens.

Week 1: students will live with home-stay families, take formal Spanish language classes, tour The Ark Herbal Garden, visit Museo Nacional (National Museum), Museo de Oro (Gold Museum), visit a local dental university, and local markets. Students will then take an excursion to Isla Tortuga in the Gulf of Nicoya located on the Pacific side of Costa Rica to allow students to draw a comparison on life and culture once they visit the Caribbean side of the country.

Week 2: students will travel by private bus to the Caribbean side of the country to a small town, Shiroles, located in the Talamanca area. While in this area, students will stay at La Finca Educativa (the Education Farm) and travel to the only local dental clinic that serves the indigenous population living in the area. Students will be able to provide educational talks about: prevention of tooth decay, feeding habits, brushing techniques, systematic management of diseases (link between systemic health and oral
health), oral care for special needs patients (elderly, pregnant women, children). Students under the
direct supervision of a dentist will be able to sterilize instruments, assist the dentist in various
procedures, apply fluoride treatments, assess oral conditions, analyze assessment data, treatment plan,
expose and develop radiographs, perform routine prophylaxis (teeth cleaning), and perform periodontal
treatment (deep cleaning).

Language of Instruction: English and Spanish
Special Activities and Workshops:
The Ark Herbal Garden, Heredia
Museo de Oro (Gold Museum) San José
Museo Nacional (National Museum) San José
Isla Tortuga cruise, Puntarenas
Caribbean cooking classes, Shiroles
Local woman’s artisan group (chocolate tour), Shiroles

Undergraduate credits: 3 credit hours
Application Deadlines:
Rolling, no later than eight weeks prior to
commencement of the program

Required resources:
Books and orientation materials are to have assignments/chapters read PRIOR to leaving on the trip
with assigned journal entries completed and emailed to krihawk@iusb.edu by the due date.

Orientation and Reading Packet. 2010. (Includes maps, outlines, and orientation material as well as
articles on Costa Rican culture, society and development, with particular attention to health
care settings. Read through this, then use it fro reference during the trip. Specific articles are
noted for journal entries.)


Grading:
Participation: 40%
Journals
Part I: 20%
Part II: 20%
Part III: 20%

Grading Scale:
A 90-100
B 80-89
C 70-79
Below a 70% is not passing
**Participation:**
Students are expected to actively participate in all classes, study groups, and regular field trips. This involvement is essential for completion of course goals. Active participation will consist of attending all classes and all excursions (with allowances made for health problems) and participating in discussions and question/answer periods.

**Journal Essays:**
An essay journal will provide the opportunity to reflect on reading, class work, field experiences and critical reflections. Journal entries will be comprehensive. Entries in Part I require students to critically think about a question related to the assigned reading. Entries should be one page in length, word processed, and single spaced. The journal entries in Part I are due June 6th and may be submitted by paper or by email (krirhawk@iusb.edu) to the course instructor.

Part II will consist of five journal entries based on five excursions experienced during the trip. Some examples may be:

- The Ark Herbal Garden (what was the most surprising information learned there? What herb or plant would you like to know more about?)
- Isla Tortuga cruise (compare the Central Valley to the Pacific Coast, what is different about the landscape, housing, people etc)
- The museum tours (what was the most interesting exhibit and why?)
- The local markets
- The trip to Shiroles (compare the landscape with the Central Valley or the Pacific Coast),
- The dental clinic, etc.

These are ideas and examples of what a student could write about in their experiential portion of their journal.

Part III will be a final reflection piece and reflect a deeper understanding of culture and the importance it plays in treating patients. Students may draw on all of their reading and experiences during the trip to write a final two page double spaced reflective essay for the final entry. There may be other options for the final piece (a classroom presentation, a university presentation, videos, picture essays, etc) that could be completed in lieu of a written essay based on student interest and instructor approval. Journal Part II and III will be due within two weeks upon return to the United States.
   What makes Costa Rica different from its’ Latin American neighbors? How did the history and founding of Costa Rica affect the indigenous population and what do you think their biggest challenge was and is?

2. Read CRR Section II: Coffee Nation, Insight Guides (pg. 116-117), and The Costa Rican indigenous population (pg 20-36).
   In what ways did coffee change the landscape and society of Costa Rica? How does the land affect the indigenous people of Costa Rica, how do they view land? Are the indigenous people set apart in how they view land and the forest, and if so how?

   Compare the culture in the Central Valley when it comes to popular sports, cooking, the role of women, to the life of an indigenous group from what you have read in The Costa Rican indigenous people. What sets these two groups apart? Are there similarities in the culture? What interests you about the culture in both areas?

   What insight do you have about the role of family, hunting, music, art, and dance in the indigenous community?

5. Read The Costa Rican indigenous population (pg 114-152).
   What is the significance of craft work and weaving to the indigenous people of Costa Rica? How central of a role does it play in their culture?

6. Read The Costa Rican indigenous population (pg 39-63).
   What role does the shaman play in the indigenous society? What was one ritual that surprised you most and why?

7. Read CRR Section VI: Other Cultures and Outer Reaches, Insight Guides (67-77 and 229-263).
   Now having read the entire book on the indigenous people of Costa Rica, what do you think their greatest struggle is in today’s society? How will they overcome this struggle? What is the future like for them?

8. Choose two to three plants found in the Medicinal Plants of Costa Rica and study them using any online sources, journal articles, and insight you may have from the reading. What role do these herbs and plants play in Costa Rican culture? How do you feel about the strong use of herbal remedies in medicine and dentistry? What types of questions do you have regarding the use of medicinal plants either personal or from a practitioner’s standpoint?
Grammar Program

Beginner Level
-Verbs  Ser and Estar, basic uses.
The Present Indicative of regular verbs : ar-er-ir.
-Personal Pronouns.
-Interrogative Sentences and Negative Sentences.
-Agreement of  Articles-Adjectives and Nouns.
-Uses of : Hay and Personal a.
-Uses of  verb Tener  and Tener que: tengo dolor de cabeza, tengo sueño, tengo hambre, etc.
The Present Indicative of irregular verbs: lista minima.
-Basic structures with Querer-Necesitar –Deber-Hay que-Preferir and Desear.
-Verbs Saber and Conocer.
-Verbs Pedir and Preguntar.
-Command forms(usted,ustedes,nosotros), basic uses (regular and irregular verbs).
The Preterit of Regular Verbs.
-Special Construction with verb Gustar.

Intermediate Level
-The Past Participle and its Special Uses.
The Perfect Tenses:
* The Present Perfect Tense
* Pluperfect Tense
* The Future Perfect Tense
* The Conditional Tense

Master Superior
-Imperative Mood: regular and irregular verbs.
The familiar Command ( tú command).
The affirmative Command.
The negative Command.
-Irregular Verbs: Present and Preterit  (review).
-Subjunctive Mood:
* The Present Subjunctive
* The Imperfect Subjunctive
* Present Perfect Subjunctive
* Pluperfect Subjunctive.
Spanish Dental Program

Designed by Ana Virginia Zeledón Escobedo (updated by Kristyn Quimby)

Dental Topics

1. The importance of visiting the dentist periodically.
2. The necessity of a good dental education from childhood to adulthood.
3. Special care for pregnant women and the ingestion or consumption of drugs or medicine during pregnancy.
4. Care of new born children and their oral health needs (ingestion of medicine, fruits, milk, etc).
5. The proper dental care of the child ages 5 to 12 years old.
6. Dental care of teenagers to adults.
7. Dental care for handicapped or special needs patients (geriatric, down’s syndrome, alcohol and drug addictions, etc).
8. Degenerative decay and the role genetics plays.
9. Slight to severe periodontal disease (description and importance of these diseases).
11. Nutrition facts according to cultural and geographical habits and the influence of dental care, or health.
12. Oral health care instructions on how to brush according to age, special cases, mental handicap, or limited mobility.
14. Basic information on visiting the Dentist; the dental examination, the dental file, the health history and chief complaint interview, the dentogram (dental chart) and clinical history of the patient.
15. Popular Latin-American word list (or traditional words of the region).
16. The role herbs and plants play in Latin American culture.
17. The Hospital; to treat a patient in the hospital, the previous (prior) interview, the clinic worksheet.
18. The emergency ward, (room): With special emphasis on cases such has home dental accidents, when a child falls or collapse (or crash).etc.
19. The dental specialist, orthodontist, surgeon, etc.