Social and Behavioral Sciences
1. This request is submitted by (department name): Veterinary Pathobiology

2. Course prefix and number: VTPB221

3. Texas Common Course Number: N/A

4. Complete course title: Great Diseases of the World

5. Semester credit hours: 3

6. This request is for consideration in the following Foundational Component Area:
   - [ ] Communication
   - [ ] Mathematics
   - [ ] Life and Physical Sciences
   - [ ] Language, Philosophy and Culture
   - [x] Social and Behavioral Sciences
   - [ ] Creative Arts
   - [ ] American History
   - [ ] Government/Political Science

7. This course should also be considered for International and Cultural Diversity (ICD) designation:
   - [x] Yes
   - [ ] No

8. How frequently will the class be offered? Fall and Spring Semesters

9. Number of class sections per semester: 1 in Fall, 2 in Spring. (One of these is an Honors section)

10. Number of students per semester: 100-200

11. Historic annual enrollment for the last three years: 463 321 305

   This completed form must be attached to a course syllabus that sufficiently and specifically details the appropriate core objectives through multiple lectures, outside activities, assignments, etc. Representative from department submitting request should be in attendance when considered by the Core Curriculum Council.

12. Submitted by:
    Dr Ian Tizard
    Course Instructor
    7 August 2014
    Date

    Approvals:
    Dr Linda Logan
    2 August 2014
    Date

13. Department Head
    21 August 2014
    Date

14. College Dean/Designee

For additional information regarding core curriculum, visit the Texas Higher Education Coordinating Board website at www.thecb.state.tx.us/corecurriculum2014

See form instructions for submission/approval process.
Texas A&M University
Core Curriculum
Initial Request for a Course Addition to the Fall 2014 Core Curriculum

Foundational Component Area: Social and Behavioral Sciences

In the box below, describe how this course meets the Foundational Component Area description for Social and Behavioral Sciences. Courses in this category focus on the application of empirical and scientific methods that contribute to the understanding of what makes us human. Courses involve the exploration of behavior and interactions among individuals, groups, institutions, and events, examining their impact on the individual, society, and culture.

The proposed course must contain all elements of the Foundational Component Area. How does the proposed course specifically address the Foundational Component Area definition above?

This is an introductory course designed to teach students about the major infectious diseases including viral, bacterial and parasitic infections afflicting humans and other mammals. Focusing on selected key diseases such as the plague, smallpox, tuberculosis, influenza and yellow fever, it will explore their history and literature, their causes, their consequences, both social and medical, and their treatment and prevention. A central theme of the course is the consistency in the manner in which societies respond to major lethal epidemics be they medieval such as the Black death or modern such as the current Ebola outbreak in West Africa. The course is directed toward undergraduate students at the freshman and sophomore level. There are no prerequisites.

Course Objectives

This course is intended to instruct students about certain aspects of the history of Medicine. Specifically about those diseases that have killed millions of humans in the past or continue to kill millions today. The course encompasses the biology and clinical features of each disease in addition to its immediate history and long term consequences to society.

Thus the student will learn the following:
- The major microbial and parasitic agents that cause human disease.
- The ways in which infectious agents cause disease.
- The ways by which the animal body defends itself.
- The control of disease by vaccination.
- The history of vaccination.

For selected infectious diseases students will learn:
- The properties of the causal organism.
- The ways in which this organism spreads
- The clinical signs and outcome of disease
- The epidemiology and spread of disease.
- Treatments and diagnosis past and present.
- The history of disease outbreaks.
- The responses of society to these outbreaks both in the short, and long term.
- The significance of these outbreaks at the time and subsequently.
- The current status of these diseases.
- The treatment and prevention of these diseases.

The following major diseases will be studied in depth:
- Plague, Smallpox, Influenza, Yellow Fever, HIV/AIDS, Tuberculosis, Poliomyelitis, Malaria, syphilis and Cholera.

The following diseases will also be studied:
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Ebola, dengue, West Nile fever, rinderpest, potato blight, anthrax, rabies.
By the end of the course the student will have a thorough understanding of the importance of infectious diseases in recent human history and will be able to use this knowledge to relate to current disease outbreaks and events.

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Core Objectives

Describe how the proposed course develops the required core objectives below by indicating how each learning objective will be addressed, what specific strategies will be used for each objective and how student learning of each objective will be evaluated.

The proposed course is required to contain each element of the Core Objective.

Critical Thinking (to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information):

Students are required to develop critical thinking skills with respect to the rationale of society’s historical responses to pandemic diseases as well as by analyzing and comparing our responses to current disease outbreaks such as MERS or Ebola virus.

Communication (to include effective development, interpretation and expression of ideas through written, oral and visual communication):

Students are assessed by two essay examinations specifically designed to integrate diverse aspects of the history of medicine and to encourage patterns of historical responses. These essay tests are in addition to computer graded multiple-choice tests designed to encourage retention of basic medical and historical facts.

Empirical and Quantitative Skills (to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions):

Students receive instruction in basic aspects of disease epidemiology including analysis of disease prevalence, incidence and relative morbidity and mortality. These are also evaluated on the basis of computer-based tests and required essays.

Social Responsibility (to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities):

The history of global pandemics is replete with occasions where physicians, health care workers and governments evaded their responsibilities with dire consequences. For example the Tuskegee incident will be examine in detail and in relation to social attitudes as well as the subsequent development of the principal of informed consent. Recent situations where health care workers filed to meet their responsibilities are discussed in a nonjudgmental manner.
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Please be aware that instructors should be prepared to submit samples/examples of student work as part of the future course recertification process.
VTPB 221

"Great Diseases of the World"

Fall Semester 2014.

Room 201 VMS
M, W, 4:10-5:25 pm

Description:

Welcome to “Great Diseases of the World”. We hope that you will enjoy the course and will become interested in learning more about the history of Medicine. This is an introductory course designed to teach students about the major infectious diseases including viral, bacterial and parasitic infections afflicting humans and other mammals. Focusing on selected key diseases such as the plague, tuberculosis, influenza and yellow fever, it will examine their history and literature, their causes, their consequences, both social and medical, and their treatment and prevention. The course is directed toward undergraduate students at the freshman and sophomore level. There are no prerequisites.

Standards:

Do not confuse the level of effort required to pass this course with the quality of work required for a high grade. Effort alone does not merit a high grade. If you just do what you are supposed to do, attend class regularly, and meet the standard requirements you will likely get a B or C. An A must be earned by a high quality of work, an exploration of ideas, intellectual curiosity and originality. Few students achieve an A grade in this course.

Course Objectives

This course is intended to instruct students about certain aspects of the history of Medicine. Specifically about those diseases that have killed millions of humans in the past or continue to kill millions today. Thus the student will learn the following:
   The major microbial and parasitic agents that cause human disease.
   The ways in which infectious agents cause disease
   The ways by which the animal body defends itself.
   The control of disease by vaccination
   The history of vaccination.
For selected diseases students will learn:
   The name and biological properties of the causal organism.
   The ways in which this organism spreads
   The clinical signs and outcome of disease
The epidemiology and spread of disease.
Treatments and diagnosis past and present.
The history of disease outbreaks.
The responses of society to these outbreaks both in the short, and long term.
The significance of these outbreaks at the time and subsequently.
The current status of these diseases.
The treatment and prevention of these diseases.
The following major diseases will be studied in depth:
   Plague, Smallpox, Influenza, Yellow Fever, HIV/AIDS, Tuberculosis, Poliomyelitis,
   Malaria, Cholera.
The following less significant diseases will also be studied:
   Dengue, West Nile fever, rinderpest, potato blight, anthrax, rabies
By the end of the course the student will have a thorough understanding of the importance of infectious diseases in human history and will be able to use this knowledge to relate to current disease outbreaks and events.

Instructors:

This course will be taught by Drs. Ian Tizard and Tawfik Omran, with the assistance of Drs. Linda Logan, and Jeffrey Musser, Department of Veterinary Pathobiology and Dr. Suzanne Burnham, Texas Dept of Health.

Where to Get Help:

Dr. Tizard's office number is 845-4276.
His email address is itizard@cvm.tamu.edu. Please email with Dr Tizard through this email address only! If Dr Tizard is not available please contact Dr. Omran at tomran@cvm.tamu.edu.

Dr. Tizard does not have formal office hours. His main office is located in Room 101, VMS. To the left of the main front entrance of the VMS building. He is normally available during normal working hours. 8-12, 1-5 daily. No appointment is necessary, just drop in.

Lecture Schedule:

This schedule is for general guidance only and may be modified based upon class progress, instructor absences and student interests.

Mon Sep 1: Introduction 1: Tizard. The Great Diseases. What are they and why are we studying them. An introduction to the microbial agents that cause disease in humans and other animals.
Wed Sep 3: Introduction 2: Tizard. The search for food and shelter. The normal microbiota. The defenses of the body and their limitations. Who benefits from making you ill or killing you? How the body responds to infections. Sickness behavior


Wed Sep 24: Smallpox and disease eradication: Tizard. The eradication of smallpox. How can a disease be totally eliminated? The concept of immunity and the first vaccines. Smallpox as a germ warfare agents. Pox vectors in vaccines:


Wed Oct 1. FIRST MAJOR ESSAY TEST

Mon Oct 6: Syphilis: Tizard. A disease that possibly came from America? A brief history. Whose fault was it? Who got it and bragged about it? Syphilis as an example of the evolution of a disease. The Tuskegee experiment and racist attitudes to disease control.

Mon Oct 13: Tuberculosis 2: Omran. Tuberculosis and related diseases in animals. The Industrial revolution. Overcrowding. Coal fires and smoking Society’s structure The victim as criminal. Multiple Choice Quiz-3


Wed Oct 22: Yellow fever 1: Logan. Human-mediated spread of infectious disease. The movement of diseases by human migration, or in this case, by the transportation of slaves. Modern examples such as West Nile and Dengue viruses.

Mon Oct 27: Yellow fever 2: Logan. How infectious diseases changed the course of history. The US Mexican War. Haiti, the Louisiana purchase, and the Panama canal. The Spanish-American War. Walter Reed and the discovery of mosquito transmission. Multiple Choice Quiz-4


Mon Nov 3: SECOND MAJOR ESSAY TEST

Wed Nov 5: HIV/AIDS 1: Tizard. The origins and spread of HIV. From the Congo to global pandemic. The immunology and prevention of AIDS.

Mon Nov 10: HIV/AIDS 2: Tizard. The global AIDS situation. Why some countries are more severely affected than others. Multiple Choice Quiz-5

Wed Nov 12: Cholera: Omran. Diarrheal diseases, the major cause of infant mortality in the world today. The identification of food and water as sources of disease. Major food poisoning epidemics.

Mon Nov 17: Malaria 1: Musser. The most important parasitic disease of our time. Disease resistance and susceptibility. Human settlement in the face of disease.


Mon Nov 24: Poliomyelitis: Omran. The first great success of the US Public Health System. How a disease can be eradicated locally. Multiple Choice Quiz-6
Wed Nov 26: Thanksgiving

Mon Dec 1: Disease and the food supply: Logan. Famine as a result of infectious diseases. The example of Rinderpest (Cattle Plague) and others

Wed Dec 3: Bioterrorism: Burnham. The deliberate use of microorganisms to cause panic, despair and death.

Textbook and Resource Material:

The required textbook for this course is “Twelve Diseases that changed our World” by I.W.Sherman. Published by ASM Press. However, there will be significant other reading required in addition to the material in the textbook. This reading material will be posted on elearning.

Access to Promed and the Internet:

Up-to-date information on emerging infectious diseases is available at ProMED (www.Promedmail.org). ProMED provides a daily report on disease outbreaks around the world. The course will make use of this information and students are required have ready access to the web and email. Classes will begin with a review of the daily infectious disease news. Students may also be required to obtain some information on diseases such as AIDS, other STDs, Lyme disease and tuberculosis from the web.

Evaluation and Grading policies:

Students will be evaluated on the basis of:

1. SIX BIWEEKLY, MULTIPLE CHOICE QUIZZES held every other Monday. The quiz with the lowest grade will be dropped. Each quiz will consist of 8 questions. They will be worth a total of 40% of the final grade. These quizzes will be conducted during the first 10 minutes of class so make sure you are not late! Scantrons will be provided.

2. TWO MAJOR ESSAY TESTS. One conducted on October 1 and one on November 3. These will each be worth 20% of the final grade (Total 40%). Each will be 60 minutes long and will require each student to provide a written answer to two or three questions. Blue books will be provided.

3. A COMPREHENSIVE FINAL EXAMINATION. This will be a short answer/ multiple choice, scantron-graded quiz with penalties for incorrect answers. This will be worth 20% of the final grade.
Test behavior. **IF YOU ARE MORE THAN 10 MINUTES LATE FOR AN ESSAY TEST YOU WILL NOT BE PERMITTED TO TAKE IT! NO EXCUSES EXCEPT FOR UNIVERSITY EXCUSED ABSENCES WILL BE ACCEPTED. YOU HAVE BEEN WARNED.**

**THE FINAL EXAMINATION WILL BE HELD** at the time scheduled by the University Registrar’s Office.

**Essay grading policies**

This course has, as a matter of policy, used essays to assess student understanding. These essays are designed to examine a student’s ability to integrate facts, to reason, to compare, and to analyze the information presented during the course. Essays also provide students with an opportunity to write well-structured, competently presented, literate English. For this reason, graders will pay attention to a student’s writing skills. Points will be deducted, at the graders discretion, if students fail to write proper sentences, apply punctuation incorrectly, or show egregious spelling errors. More importantly, this is a science-based course and science terms are used with precision. Students will be provided with a list of key words that must be spelt correctly. This list is available on elearning. Failure to spell any of these words correctly will lead to a deduction of one point.

Final grade assignments will be assigned as:

- A = 90 - 100%
- B = 80 - 90%
- C = 70 - 80%
- D = 65 - 70%
- Below 65% will be a fail.

**PLEASE NOTE:** The passing grade for this course is 65%.

**Optional Essay:**

Students may also, if they choose, write a 5-page essay on a topic that will be announced by Dr Tizard in November. **This optional essay will only be read and graded if a student is within two points of a higher grade.** The essay can be submitted at any time prior to the Final Examination. It should be submitted on-line as described in elearning. It will be worth up to 3 percentage points.

**Absences and Make-up Exams.**

If a student fails to take one of the required tests or quizzes, they must contact both the BIMS office and Dr. Tizard or Dr. Omran within THREE working days of their return to the University. **The only excuses that will be accepted are those recognized by the University.**
Written documentation will be required. - No exceptions - don’t even ask! If you know that you will have to miss a scheduled examination, please talk to Dr. Tizard first. **The format of the make-up test may be an essay and it may take much longer than the original test.**

**Students with Disabilities**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities in Room B118 of the Cain Hall, or call 845-1637.

Students who have been certified as disabled by the University should visit with Dr. Tizard as soon as possible after the beginning of the semester to ensure that suitable arrangements are made. **Please do not hesitate to discuss your learning needs with Dr Tizard at any time. We pledge to give our disabled students every opportunity to succeed.**

**The Aggie Honor Code**


"An Aggie does not lie, cheat or steal, or tolerate those who do."