



Faculty Worksheet for Communication-Intensive (C-I) Course Certification

www.cxc.lsu.edu

Professor's Name	First semester to be taught as C-I	Course Abbreviation/Number	Credit Hrs	Max Enrollment
Cameron Thrash	Spring 2014	BIOL 4125	3	35:1 max w/o GA 30
Course Title		Communication Modes		
Prokaryotic Diversity		Which communication modes will your course emphasize? <input checked="" type="checkbox"/> Written <input type="checkbox"/> Spoken <input type="checkbox"/> Visual <input checked="" type="checkbox"/> Technological		
Learning Objectives – List the course's learning objectives below. You are encouraged to include at least one communication-specific objective. Please use bullets to separate objectives.				
Understand microbial diversity across the tree of life; Compare similarities/differences among the Domains Bacteria and Archaea; Understand the role of the 16S rRNA gene as a proxy for microorganisms & how this is used in research; Describe multiple microbial metabolisms & lifestyles; Describe what is meant by phylogenetic, genomic, metabolic, & lifestyle diversity, and their interdependence; Estimate the relative energetic gain between different metabolisms; Interpret primary literature on microbial metabolism, community analysis, classification & comparative genomics; Rationally classify a microorganism based on 16S rRNA genes, metabolic & genomic properties; Hypothesize about the role of microorganisms in a natural sample based on phylogenetic placement and/or core genome content; Argue for or against the existence of microbial species; Create a Wikipedia entry describing a bacterial or archaeal taxon of your choosing; Interpret the microbial diversity in a natural sample based on 16S rRNA gene data.				
Assignment Overview – C-I courses use informal communication exercises for learning and formal communication exercises for demonstrating skills and knowledge within the discipline. Briefly describe the informal & formal communication activities/projects that you will include for each mode under which you are certifying. Informal and formal activities are required for both modes.				
Informal activities for Mode 1:		Informal activities for Mode 2:		
In-class writing/reflection on pre-class quizzes, written summaries of their Around the Tree presentations, peer-review of major writing assignments as well as the Wikipedia pages.		Use of Twitter to: 1. Disseminate information about microbial strains researched in the Around the Tree assignments and Wikipedia pages 2. Maintain connectedness to course material outside the classroom 3. Rapidly and concisely ask and respond to questions from the instructor and other students		
Formal activities for Mode 1:		Formal activities for Mode 2:		
Two major writing assignments.		Development of a Wikipedia entry on a microbial taxon for which there is either no current page, or merely a "stub."		
Teaching – In addition to assigning communication activities, C-I instructors are required to teach effective communication skills specific to the discipline. Describe your teaching efforts as they relate to your two communication modes of focus.		Feedback-Improvement Loop – Describe your feedback process and the opportunities students will have to incorporate your feedback for deeper learning of the two communication modes you will focus on in this course.		
Class periods will consist mostly of active learning techniques that have students writing for reflection, conversing with others to answer questions/get questions answered, teach and present material, debate, and participate in classroom discussions. They will also have in-class exercises that require internet research and basic microbial ecology analyses. All of this will be conducted in the context of reading, writing, and citing primary scientific literature, such that students learn the specific styles and mechanics associated with microbiology literature.		Both modes will have both peer and instructor feedback at intermediate (draft) stages, which students will then incorporate into final drafts. Each assignment will be peer reviewed by two students and myself according to a rubric, and the peer review itself will itself be graded on a rubric so students earn points/are incentivized to do well.		
Grading– Outline the course grading scale to illustrate how 40% of the course grade is tied to communication-based activities.		Studio Support – Describe how you will use the CxC Studios as a resource for this course (if applicable).		
The class is based on 1000 total points, with the following breakdown: Quizzes, 20% (0.5% each x 40); In-class exercises, 10%; Around the Tree, 5% (2.5% each x 2); Writing assignments, 20% (10% each x 2); Peer review, 15% (5% each x 3); Wikipedia proposal, 5%; Final Wikipedia page 20%; Microbial Ecology (BE) Analysis 10%. The major assignments are detailed in a supplemental attachment (Major Assignments)		The C-I studios will primarily help with guiding the Wikipedia page construction process, including navigating Wikipedia and aiding students in getting their entries approved.		