UCSF Bridges Curriculum Charge Document  
Project Element: FI: Foundational Sciences  
Faculty Lead(s): Marieke Kruidering, PhD and Shelley Adler, PhD

Background and Purpose:
By way of this charge document, the UCSF Office of Medical Education is defining the scope of work and deliverables for the FI Foundational Sciences. This charge document appoints Marieke Kruidering, PhD, and Shelley Adler, PhD, as the Faculty Leaders of the FI Foundational Sciences Group. In addition, the charge provides guidance on roles, processes, and deliverables through June 30, 2015.

The purpose of this group is to design, develop, and plan the implementation of the Foundational Sciences curricular element for the Bridges Curriculum. These experiences will take place throughout the Foundations I phase of the Bridges Curriculum. The first class to fully participate in this new curriculum will enter UCSF in 2016.

The educational goals of the UCSF Bridges Curriculum include standardized outcomes with individualized pathways: students must master the competencies needed to perform well in their internship, but should have the opportunity to tailor their educational experience based on career interests and unique needs. The work of the Foundational Sciences Group directly supports the successful completion of Bridges Project Goal 2, Objective 2.1.

Goal 2: Redesign classroom-learning activities to integrate foundational sciences relevant to improving health outcomes with the biomedical, social, behavioral and systems sciences needed to understand (1) etiology, diagnosis, prevention and management of disease and (2) strategies for supporting health and wellness.

Objective 2.1: Design courses to integrate foundational sciences for understanding and improving health outcomes with foundational sciences for understanding health, disease and therapeutic interventions; deliver foundational sciences content in a blended learning model for maximum impact and flexibility.

Please take a minute to review the comprehensive Bridges Curriculum Charter in Appendix A prior to your group kickoff meeting and share the charter with group members.

Foundational Sciences I Group Goal:
The goal for the group is to produce a blueprint, curriculum plan, implementation plan, and learning activities for the Foundations I Foundational Sciences element of the Bridges Curriculum.

Deliverable Process Map
Faculty Leads: Marieke Kruidering and Shelley Adler
Education Dean’s Office Liaison: Susan Masters, Curriculum Dean

Final Deliverable Approvals: Faculty Leads, Marieke Kruidering and Shelley Adler

Deliverable 2.1 Blueprint (due October 15, 2014)
A blueprint of the Foundational Sciences curriculum, including a set of guidelines that define the requirements for all students across the Foundations I phase.

Blueprint Quality Criteria:
The final blueprint must include the following elements, as outlined in the template:

- Goals and purpose of the Foundational Sciences (including goals as noted above)
- Documentation of where the Foundational Sciences elements integrate into the Bridges Curriculum Phases (FI, F2, Career Launch)
- Defined set of requirements for completion of the Foundational Sciences curriculum for all students, including specialized programs
- Glossary of terms specific to the Foundational Sciences (name and definition) element. This can include definitions of blocks and definitions of what have been called themes, which we may want to rename “topics.” Please use MedBiquitous definitions where possible. Additional terms to define include but are not limited to: SBS, emerging and enduring sciences, specific LCME topics, block, clerkship-specific foundational sciences, asynchronous learning, independent learning, self-directed learning, footprint.
- Design criteria for each curricular element (e.g., time allocation, longitudinality)
- Documented interdependencies and contingencies with other curriculum elements (e.g., integration with CMC and inquiry elements)
- Documentation of having vetted recommendations with key stakeholders (required: Curriculum Dean)
Deliverable 2.1 Curriculum Plan (Draft due November 15, 2014, final due December 15, 2014)
A curriculum plan for the Foundational Sciences, including goals, competencies, learning objectives, learning activities, assessment methods, and element milestones for Foundations I.

Curriculum Plan Quality Criteria:

- Follows the designated template linking the Foundational Sciences element to graduation competencies
- Uses MedBiquitous terms to describe assessment tools and learning activities.
- Clearly delineates between milestones that require classroom learning (broadly defined) and those which will be reached through experiential learning
- Defines block names, block objectives, and documents the breakdown of the most represented content for each of the Foundations I blocks
- Includes recommendations for draft objectives for Foundations II which delineate the developmental progression of the complexity for each topic area
- Provides flexibility in types of learning activities
- Defines assessment targets and milestones and identifies relevant assessment types
- The curriculum can be delivered in the time allotted for Foundational Sciences in FI
- Before December 15, 2014, curriculum recommendations have been vetted with key stakeholders (CMC leaders, assessment group, Curriculum Dean, and faculty)
- Before December 15, 2014, a communications plan for disseminating the completed deliverable, including the framework for dissemination, list of stakeholders, proposed channel of communication (e.g., town hall, newsletter), developed in collaboration with Project Manager
Deliverable 2.1 Implementation Plan (Due March 1, 2015)
An implementation plan for the new Foundational Sciences element of the curriculum for the 2016-17 academic year, describing how the element will be operationalized and integrated into the overall curriculum for Foundations I.

Implementation Plan Quality Criteria:
- An overall timeline for delivering Foundational Sciences activities and strategies for the rollout in 2016-17
  a. a transition plan for integrating new and enduring curriculum, including integration into special programs (MSTP, PRIME, etc.)
- Identification of implementation interfaces (contingencies)
- A risk assessment highlighting potential risk of changes or roadblocks that may arise and contingencies for problems
- An operational plan for the governance and administration of the Foundational Sciences that includes infrastructure needs, faculty and staff resources, technology support, committee reports, etc.
- A leadership and governance plan for learning activities including:
  a. job descriptions and selection criteria for faculty/course directors
  b. a recruitment plan for faculty/leaders
- Collaborate in developing an assessment of faculty readiness and recommended plan for faculty development for new curriculum (Charged to faculty development group)
- Collaborate in developing a recommended plan for integration of interprofessional education if appropriate (Charged to IPE Group)
- Collaborate in developing a recommended communications plan for Foundational Sciences implementation (with Project Manager)
- Collaborate in developing a program evaluation strategy (Charged to evaluation and assessment group)
Deliverable 1.1 Learning Activities (due June 30, 2015)
A developed set of Foundational Sciences learning activities, including course development, to be implemented in the fall of 2016.

Learning Activity Development Quality Criteria:
- Completion of faculty leadership selection (to participate in learning activity development)
- Defined learning objectives for all Foundational Sciences learning activities
- Defined centralized classroom vs online vs independent learning activities
- Defined grading strategies and supporting technology for students
- Documented policies and procedures for students, including grading requirements and student guidelines

Required activities during each phase of deliverable development:
- Hold kickoff team meeting, including Bridges Project Manager, Lindsey Cannon, following an agenda that includes all topics outlined in the template
- Complete a project plan including a project timeline and identified working groups
- Establish and document roles and responsibilities - may use a project Responsibilities Assignment Matrix (template to be provided)
- Identify interworking group dependencies; integrate other Bridges subgroup members into working groups as appropriate
- Seek feedback from appropriate stakeholders across phases of development (with support from the Project Manager as necessary)
- Receive deliverable approval (as determined per each phase’s quality criteria)
- Develop communication plan for final product in collaboration with the Project Manager, Sponsor, and additional Bridges stakeholders, as necessary

Resources:
The Office of Medical Education will be able to provide some limited resources to support complex project activities, for example, support for stakeholder and outreach events. Please contact the Bridges Project Manager at Bridges@ucsf.edu to discuss the group's specific needs.