General Education Handbook

This document was reviewed by the General Education Committee at its meetings on March 30 and April 13, 2022, September 13th, 2023 during which committee members provided feedback and edits. Updates to the handbook were made February 16th, 2024.

Section 1: General Education Overview

General Education is an essential component of a liberal education broadly defined, and the General Education Committee is guided by several principles as it governs the program. (a)

- The General Education Committee affirms its commitment to **informed and evidence-based decision-making** using current literature in the field. (b)

- In line with the theories and best-practices of General Education, as well as the Utah system of higher education's policy on General Education (R470), we affirm that college-educated people should possess **a common, general knowledge base beyond their major**. College graduates should be familiar with the knowledge and the "ways of knowing" encompassed by a variety of fields and methodologies, including American institutions, composition, quantitative literacy, fine arts, humanities, social and behavioral sciences, life sciences, physical sciences, and other specified areas. Students should get specific practice in communication and they should be exposed to the world outside of the United States. (c)

- We affirm that effective learning and problem solving transcend disciplinary boundaries. General Education should help students **integrate and apply knowledge across the disciplines** because the problems faced by local, national, and global communities do not confine themselves to solutions stemming from one discipline alone. (d)

- In addition to imparting substantive knowledge across multiple disciplines, we affirm that general education courses should help students develop a **wide range of important skills**, particularly those echoed in our General Education learning outcomes: effective communication, quantitative literacy, critical and creative thinking, civic engagement, working professionally and constructively with others, computer literacy, and information literacy. Further, we affirm that the substantive knowledge inherent in a General Education course should address **big ideas, concepts, questions, and/or habits of mind** that students should take away from the course. (e)

- The General Education program should consist of courses that are integrated to help students explore knowledge, develop skills, and make connections. It aims to be an integrated foundation that develops well-rounded individuals, engaged citizens, and lifelong learners. (f)

The following handbook describes the scope, composition, and procedural operations of the General Education Committee. It also offers to faculty seeking to have their courses meet General Education designation an overview of some best practices for General Education courses. Additionally, this handbook provides the procedural instructions and designation criteria to help departments and schools successfully move General Education courses and other relevant matters through the General Education aspects of the curricular process. (g)

Section 2: Scope of the General Education Committee's Responsibility

The General Education Committee is sponsored by the Provost's Office, has a place in the curriculum process akin to school curriculum committees, and is responsible for: (a)

- Serving as the principal governing body for the General Education program.
- Reflecting periodically on its own operations and making adjustments as needed, including to this handbook.
- Reviewing and developing General Education criteria, forms, and assessment.
- Discussing, considering, and developing proposals regarding the General Education program.
- Reviewing all substantive proposals involving new courses designated as General Education and submitting its decisions to the Senate Curriculum Committee and the Faculty Senate.
- Reviewing all program changes that involve General Education requirements and reporting its decisions to the Senate Curriculum Committee and the Faculty Senate.
- Scheduling and conducting regular 5-year reviews of all courses designated as General Education and reporting decisions to the Senate Curriculum Committee and the Faculty Senate.
- Updating procedures, policies, and forms pertaining to General Education.
- Providing full and fair consideration of all proposals brought before the committee.

The General Education Committee is not responsible for deliberating non-General Education matters that are the prerogative of the Senate Curriculum Committee. However, such changes should come to the General Education Committee as information items via the Faculty Lead. (b)

Section 3: General Education Committee Members and Charge

The General Education Committee shall be composed of the following voting members: (a)
- Three faculty from the School of Humanities and Social Sciences
- Three faculty from the School of Science, Math, and Engineering
- Two faculty from the School of Arts, Communication, and Media
- One faculty from the School of Business
- One faculty from the School of Applied Technologies and Technical Specialties
- One faculty from the School of Health Sciences
- ePortfolio Coordinator or designee
- Library Director or designee
- Associate Provost responsible for General Education or designee

The General Education Committee shall also have the following non-voting members: (b)
- Associate Dean of General Education (Chair, see below)
- Assistant Provost for Curriculum and Academic Systems or designee
- Director of Advising or designee

Faculty serving on the General Education Committee will also serve as designation liaisons and be responsible for directing the work of a designation peer review group. Faculty on the committee are expected to serve as a liaison for a designation in which they teach, have taught, or in which they have expertise. When interacting with designation peer review groups, designation liaisons will: (c)
- Invite all members of the designation group to a meeting each academic year to discuss the designation and deliberate any issues the group would like the designation liaison to bring to

the General Education Committee for discussion.
- Assign course reviewers to new and 5-year course reviews, using the designation group list. However, the designation liaison will allow the faculty originator to choose at least one of the five designation reviewers from the designation group list.
- Coordinate discussions with course reviewers when there is disagreement among them.

All faculty on the General Education Committee shall be chosen in a collaborative process in which the Associate Provost for Academic Operations and the President of the Faculty Senate make decisions based on a list of potential members provided by the academic Deans. Periodically the Associate Provost for Learning Advancement will put a call out for service on the General Education Committee. Faculty wishing to serve should contact their respective Deans and Associate Deans/Chairs to express their interest and indicate the General Education designations in which they have expertise. When selecting committee members, the Associate Provost for Academic Operations and the President of the Faculty Senate will strive to ensure all designations are represented. This will require considering the expertise of potential new members along with the expertise of returning committee members, both faculty and non-faculty members. (d).

When members begin their term on the General Education Committee, they shall receive a charge from the Provost that includes this language: "In your role as a member of the General Education Committee, I ask that you act on behalf of the General Education program itself, which may require that you consider and respect the college-wide interests of that program over the interests of your particular office or department." (e)

Like the operation of the committee itself, leadership of the General Education Committee is intended to be an example of shared governance and shall be constructed as follows: (f)

- Chair. The Associate Dean of General Education, who does not have voting rights, shall chair committee meetings, collaborate with the Faculty Lead on agendas, represent the General Education program to the Utah system of higher education, represent the General Education program to the Associate Dean Council, assign designation liaisons, and be available in the Faculty Senate and the Senate Curriculum Committee when there are opportunities for administrative reports or when curriculum is discussed. If the Associate Dean cannot chair a meeting of the General Education Committee, the chair role shall be performed by the Assistant Provost for Curriculum and Academic Systems or their designee, neither of which has voting rights.
- Faculty Lead. Faculty members of the General Education Committee shall elect one of their own for a three-year term to serve as the Faculty Lead. The Faculty Lead shall collaborate with the Associate Dean on committee agendas and shall represent the committee's views and decisions—not their own views and votes—to Faculty Senate Leadership, the Senate Curriculum Committee, and the Faculty Senate. The Faculty Lead is responsible to coordinate the work of the designation liaisons and ensuring that designation peer review happens in a timely manner. The Faculty Lead retains their voting rights while serving in this role. They will have two-courses reassigned time to fulfill responsibilities of the committee.
- The Chair of the General Education Committee and the Faculty Lead are jointly and equally responsible for ensuring that all matters before the committee receive a full and fair hearing.
- The Office of the Assistant Provost for Curriculum and Academic Systems is responsible to track all proposals on the curriculum site, prepare meeting agendas, keep all meeting minutes, record all actions, and distribute materials in a timely manner to the committee members.

Section 4: Operation of the General Education Committee

The General Education Committee is responsible for making determinations regarding new General Education course proposals, 5-year General Education course reviews, program changes that affect General Education, and larger initiatives that affect or are contained within General Education. (a)

The General Education Committee shall meet twice monthly during the school year unless demand for course and program reviews or other substantive issues warrants otherwise. (b)

The committee shall employ meeting procedures that ensure full and equal deliberation before votes are cast. (c)

A quorum must be present for the General Education Committee to vote on motions and proposals. A quorum consists of at least 8 faculty committee members being present, having granted their proxy to another voting member of the committee, or having been replaced by another faculty member from the absent member's school. (d)

Grants of proxy must be documented in writing prior to the proxy vote being cast. This documentation may take the form of an email from the absent committee member to the proxy recipient, with copies to the Chair and the administrative support for the committee. It may also take the form of a typed or handwritten signed letter that the missing committee member gives to the proxy recipient, who brings the letter to the committee meeting. Grants of proxy may be blanket or specific—a blanket proxy allowing the proxy recipient to vote their conscience, and a specific proxy directing the recipient to vote in certain ways on certain motions. The written documentation of proxy must specify the nature of the proxy grant. (e)

Decisions of the General Education Committee—including whether and how to update this handbook—shall be made my majority vote of the voting members or proxies/replacements. Thus, motions and proposal pass with 8 or more votes in the affirmative, so long as a quorum exists at the time of the vote. (f)

Course proposals and programs falling under the responsibility of the General Education Committee will only be reviewed after the department and the originating school curriculum committee approve and send them forward. (g)

Reviewing course proposals

In reviewing courses for the General Education program, the committee has to determine whether each course fits the designation it seeks, whether the course's learning outcomes align with those of the program, whether the course assignments and teaching methods align with the course learning outcomes, whether the course assignments and teaching methods accord with expectations set out in this handbook, whether the course contributes to assessment of the program, whether the course aligns with others in the Utah system, whether the course can transfer to other Utah institutions, and whether the program's overall or designation-specific course bank needs a particular course. All course proposals will be reviewed according to the following: (h)

- If a course's designation fit is unclear, the committee, by majority vote, may request the course be referred to the appropriate designation peer review group.

- Prior to the beginning of every academic year the leadership of the General Education Committee will work with Associate Deans/Chairs to identify groups of full-time faculty who teach courses in each designation to serve as designation peer reviewers. The number of faculty in each designation group will depend on how many courses within a designation are up for review in the academic year. A single faculty member will not be given more than 10 courses to review in any given academic year. Designation groups will have faculty from across the college, as appropriate and representative of the designation. Full-time faculty who teach a General Education course within a designation are eligible to submit their names as a designation reviewer. Faculty interested in being a reviewer should contact their Associate Dean/Chair. Contributions made as a General Education designation peer reviewer will count as service to the College in the faculty rank and tenure process.

- When reviewing courses, the reviewers will submit to their designation liaison a form with comments on the strengths and weaknesses of the course in relation to the designation criteria and whether they would 1) agree that the course fits the designation, 2) agree that the course can fit the designation if revisions are made, or 3) not agree that the course fits the designation. Those determinations and comments will be brought to the General Education Committee by the designation liaison as a recommendation of approval, revision, or disapproval.

- Designation peer review must occur in a timely manner according to the curricular calendar.

- If at least two out of the three peer reviewers would like to see revisions to the course or if one of out the three indicates that it should not be approved regardless of revision, the designation liaison will coordinate a discussion between the three course reviewers to determine if the course should be brought to committee as an approval, revision, or disapproval.

- If the result of the peer review is a recommendation for revisions, the General Education Committee will send the course back to the faculty originator with the comments from the peer reviewers. The course will be put back on the committee's agenda within the next two committee meeting dates for discussion and vote.

- If the result of the peer review is a recommendation not to approve the course, the General Education Committee may choose to hold a vote then or send the course back to the originating school curriculum committee for its consideration. A vote of the General Education Committee on the course shall not be held absent consideration of the specific feedback from the designation peer reviewers who looked at the course. If the course is sent back to the originating school for further consideration, the course (if a 5-year review) must be placed back on the schedule for a formal approval/disapproval vote prior to the catalog deadline.

- If the result of the peer review is no specific recommendation or a recommendation for approval, the course will be brought before the General Education Committee for consideration and a vote.

- The General Education Committee will not consider incomplete proposals for new General Education courses. The complete Course Curriculum Outline, the General Education Rationale, and the representative syllabus must be submitted to the committee by the department. When the General Education Committee considers courses for adoption or renewal in the General Education program, its members will consider the following information:
  o Course Curriculum Outline—by the sponsoring department
  o General Education Rationale—by the sponsoring department
  o Representative Syllabus—by the sponsoring department

- ePortfolios randomly selected from students who recently took the course—by the ePortfolio Coordinator (Not applicable for new courses)
- Completion and equity data from the last three semesters—by the Associate Dean of General Education (Not applicable for new courses)
- Feedback from the faculty on the appropriate designation peer review group
- Spoken comments and responses to questions—by the originating faculty from the sponsoring department who attends on the scheduled date
- Other information any individual or committee—like a school curriculum committee—submits to the committee
- Transferability of the course to sister institutions in USHE – by Curriculum & Academic Systems

General Education courses must be reviewed and reapproved every five years, or they lose General Education designation. Departments with courses that do not complete a review at five years will be notified and warned that the review has not been completed. If the review is not completed, the General Education Committee may take action to remove the course's General Education designation(s). The Chair shall regularly publicize lists of courses and their 5-year review status. (i)

For existing courses going through substantive changes, including designation changes, significant modification to the curriculum or the teaching methods, the course will go through the 5-year review process, even if it has been less than five years since its last review. However, once these changes are completed and passed, the updated course will be assigned a new review date five years hence. (j)

The path of General Education courses after the General Education Committee.

Upon approval, new courses go to the Senate Curriculum Committee as approval items, while 5-year reviews go forward as consent items unless there are non-Gen Ed changes to the course that the Senate Curriculum Committee needs to approve. Once approved by the Senate Curriculum Committee the course will move to the Faculty Senate according to the curriculum process. If passed in the Faculty Senate, the courses go as recommendations to the Provost. (k)

If the General Education Committee disapproves either a new course proposal or a 5-year review of a course, that decision moves to the Senate Curriculum Committee as an approval item. If the Senate Curriculum Committee rejects that approval item and passes the course as a General Education course despite the intent of the General Education Committee--and if that decision is upheld by the Faculty Senate--then the Associate Provost for Academic Operations brings the disputed course to the Provost for their final decision. The Provost may determine the documentation and discussion they require before making a decision. The Provost's decision is not subject to appeal. (l)

Reviewing Programs

When an academic program proposes curricular changes in its Program Curriculum Outline (PCO) that affect the General Education program—including, but not only, specifying or embedding General Education requirements—the PCO must be put on the General Education Committee's agenda for consideration whether or not the General Education requirements have changed. If specifying or embedding General Education requirements, the Department must submit the proper forms to that effect. The Committee will review the PCO and hear from the appropriate Dean, Associate Dean/Chair, and/or faculty before making its decision. (m)

Specifying General Education requirements in any academic program requires justification to the General Education Committee that is grounded in accreditation standards, bachelor's degree requirements, industry expectations, pre-requisite fulfillment, or pedagogical necessity. Course specifications must be scrutinized anew each time an academic program comes through the General Education Committee. (n)

Embedding General Education requirements in the design of the academic program's other coursework requires justification to the General Education Committee as noted above with respect to specifying requirements and requires clear explanation of how and where students attain the embedded requirement. Programs must also demonstrate how they are assessing the efficacy of the embedded requirement. Embedded General Education requirements must be scrutinized anew each time an academic program comes through the General Education Committee. (o)

If passed, proposals for program changes affecting General Education will go to the Senate Curriculum Committee and then the Faculty Senate. (p)

If rejected, proposals for program changes affecting General Education will be sent back with comments to the originating school curriculum committee. (q)

Development or revision of designation criteria

On their own initiative or at the direction of the General Education Committee, liaisons can lead designation groups in a discussion of the designation language that may result in a proposal to modify that language. (r)

A proposal to modify an existing designation's language must be discussed thoroughly in the General Education Committee before it votes on the new language. The committee will strive to keep the style, structure and expectations of various General Education designations similar. (s)

If passed, the proposal to modify an existing designation's language must also pass the Senate Curriculum Committee and the Faculty Senate. Neither of those bodies may directly edit the designation language but may send editing suggestions back to the General Education Committee for consideration and revote. (t)

Input on college-wide changes.

For changes to the General Education program, its designations, assessments, or other matters that have college-wide impacts, the General Education Committee shall ensure the following: (u)
- All faculty will have the opportunity to provide comments and suggestions.
- All schools, through their school curriculum committees, will have the opportunity to review, discuss, and provide comments and suggestions.
- There has been sufficient college-wide involvement in the development and review of proposals.

Section 5: Considerations and Criteria for Courses Seeking General Education Designation

In addition to the specific criteria for each General Education course designation, other important considerations for courses seeking General Education designation are as follows: (a)

The General Education Committee will not accept any course requesting General Education designation that is solely an introduction to a discipline. General Education courses should emphasize broad, integrative learning across disciplines and fulfill General Education learning outcomes in addition to disciplinary learning outcomes. (b)

General Education should be integrative in nature and emphasize connections between and relevance to other disciplines. These courses should provide insights into how knowledge in one field is applicable to problems faced by society. By learning problem solving skills in different disciplines, students will be more creative in personal problem solving and more perceptive to the world around them. (c)

General Education courses should emphasize understanding the underlying principles of the relevant core, institutional, or distribution area designation. This should be reflected in the course syllabus and assessment practices. These underlying principles are indicated within the specific criteria for each General Education designation. Courses should strongly represent the role of their designation in the General Education program. (d)

General Education course requirements vary by program credential and discipline. Specific requirements can be found in the SLCC General Catalog and on the General Education webpage. (e)

General Education courses should not have prerequisites except in the cases granted by the Senate Curriculum Committee upon recommendation by the General Education Committee. (f)

General Education courses should hold high expectations for student learning and should exhibit college-level rigor. They should integrate high-impact practices recognized in the designation to which the course is assigned in addition to a meaningful ePortfolio assignment that is accompanied by deep reflection. The overall course grade must reward student effort on the ePortfolio assignment. (g)

In accordance with R470 and where possible, General Education courses should align with those at other public Utah colleges and universities. (h)

Section 6: Learning Outcomes and Best Practices

Course-level learning outcomes for General Education courses should address as many of the General Education learning outcomes as appropriate and be set within the disciplinary context of the course and the content expectations of the designation criteria. (a)

In line with the current literature, General Education courses should help students make connections between courses and disciplines and develop skills for students to become active and motivated in their learning. Teaching methods in General Education courses should actively engage students and develop not only knowledge but higher order thinking skills. They should focus on integration and application of knowledge and skills. In using active learning methods, instructors should help students synthesize concepts from multiple disciplines and viewpoints and conceptualize the interdisciplinary nature of real-world problem solving. Active learning should promote such critical thinking skills as analysis, interpretation, synthesis, problem solving, argumentation, and evaluation of class content. (b)

General Education courses should connect learning outcomes to teaching methods and follow best practices in teaching. In particular, the literature highlights the use of high-impact practices and active learning methods such as: (c)

- Case studies
- Group problem solving
- Peer teaching
- Role-plays
- Multi-step group projects
- Community-based learning
- Hands-on experimentation

- Inquiry based learning
- Simulations
- Argumentation/debate
- Individual/group presentations
- Interactive lecture
- Class discussion
- Student response systems and lecture

The literature on General Education best practices also affirms that assessments should be broad and should assess not only content knowledge but also the course's stated learning outcomes. Faculty might consider assessments such as: (d)

- Demonstrations
- Experiments
- Videos
- Oral presentations
- Panels
- Blog posts
- Multi-media projects
- Critical reflections

- Posters
- Brochures/flyers
- Public service announcements
- Maps/charts/graphs
- Research/argument/critique papers
- Slide presentations
- Exams
- Art pieces

General Education courses must: (e)

- Point students to the Institutional Syllabus in the learning management system for important information about student resources and policies affecting students.
- Put the course syllabus in the learning management system so that students can download it in its entirety.
- List in the syllabus the course learning outcomes and how they tie to the General Education learning outcomes.
- Provide clear explanation in the syllabus of the ePortfolio requirement—including signature assignments and reflection—so the General Education Committee can understand what is being asked of students. The most updated ePortfolio syllabus statement will always be posted here: https://faculty.slcc.edu/eportfolio/resources.aspx. Note that while putting that statement in the syllabus is important, it does not sufficiently explain a particular course's signature assignments and reflection.
- Explain to students that it is a General Education course, where it fits in the scope of the General Education program, the nature of its General Education designation, and the similarities and differences between that designation and others. How this is done is up to faculty, but it must be explained with sufficient clarity to the General Education Committee. If they choose, faculty may use any of the Explaining General Education material on the General Education Faculty Resources page: https://www.slcc.edu/gened/faculty-resources.aspx

Section 7: Purpose and Effective Implementation of the ePortfolio

ePortfolio is a common pedagogy across the whole General Education program intended to help students understand the program as an integrated foundation to their future success in their majors, in life, and as citizens in a diverse democratic republic. The General Education ePortfolio contains significant artifacts from all General Education courses as well as reflection on those assignments

and/or courses. The ePortfolio allows students to document their academic and professional goals as well as their co- and extra-curricular activities. Faculty teaching General Education courses should help students use the ePortfolio to cohesively showcase their academic work and their reflections as they move on to a bachelor's program or into the workforce. Faculty should also know that the ePortfolio is used to assess student attainment of General Education learning outcomes. (a)

To the extent possible, faculty must follow the signature assignment and reflection guide for the designation their course fits, and have students showcase signature assignments and reflection in their ePortfolio as documentation of their General Education learning. Faculty have mapped the requirements for signature assignments and reflection in each designation. Those signature assignment guides are located on the General Education Faculty Resources Page: https://www.slcc.edu/gened/faculty-resources.aspx (b)

The ePortfolio is a requirement for all General Education courses and should be introduced to students early each semester as an integral part of the course rather than as an add-on. There are online and in - person resources for students and faculty who need assistance in setting up an effectively implementing ePortfolio. https://www.slcc.edu/eportfolio/ The ePortfolio component of a General Education course must count toward the overall course grade and not be extra credit. The total weight of the ePortfolio in the course grade is left to faculty or departments to determine, but it cannot be 0%. (c)

A signature assignment is a real-world application of knowledge that addresses the General Education learning outcomes that faculty have mapped to each designation. In developing signature assignments instructors should consider how they show application of General Education learning outcomes as well as how they allow students to be expressive, creative, and engaged, while demonstrating content mastery of the course. Signature assignments should be significant, meaningful, and should help students synthesize and apply knowledge. Signature assignments should allow students to showcase their best work and be an asset to them in the future. The General Education Committee is especially interested in signature assignments that go beyond uploading a document, and instead prefers to see assignments where students are actively constructing and/or demonstrating knowledge in the ePortfolio itself. (d)

In addition to at least one signature assignment for each course, students are also required to complete a reflection on a specific assignment or on the whole course. Intentional reflection can take on many forms: memoirs, personal essays, reflection essays, video diaries, documentaries, lab reports, research journals, etc. Regardless of the name or the form, reflection requires the student to think critically about learning and connections they make among experiences. The ePortfolio Office has resources for faculty on the use of reflection and developing effective reflection prompts or assignments. https://faculty.slcc.edu/eportfolio/working%20with%20students/reflection.aspx (e)

Appendix A:
General Education Course Criteria

The criteria below, organized by General Education designation, are to be used in course development, revision, and review to ensure that the courses are meeting the goals of the General Education program. The designation criteria below should be looked at yearly and be reviewed and revised at the discretion of the General Education Committee. Lists of approved courses in each designation are located in the General Education section of the SLCC Catalog.

AMERICAN INSTITUTIONS (AI) [Designation updated Spring 2014]
Salt Lake Community College's American Institutions (AI) requirement is meant to ensure that in accordance to the Board of Regents Policy 470 and the Utah State Code 53B-16-103(b), prior to receiving a bachelor's degree from a USHE institution, all students "shall demonstrate a reasonable understanding of the history, principles, form of government, and economic system of the United States". The fundamental objective of this requirement is to provide students with the knowledge and skills necessary for informed and responsible citizenship.

LEARNING OUTCOMES
Upon completing an American Institutions (AI) course, students will be able to:
- demonstrate a basic understanding of the founding and political, social and economic development of the United States
- demonstrate an understanding of the meaning and implications of participatory democracy
- write effectively about the history, principles, form of government and economic system of the United States
- analyze and contextualize primary source documents
- engage a diversity of viewpoints in a constructive manner
- apply knowledge and analysis to contribute to contemporary social dialogue
- demonstrate computer and information literacy skills

PEDAGOGICAL INSTRUCTIONS
Each American Institutions (AI) course will:
- rely upon a coherent theme or an analytical framework to provide continuity
- require students to complete significant writing assignments
- require students to engage in class discussions and/or other collaborative activities
- engage students—through the e-portfolio signature assignment—in the methods used in the discipline as well as in some aspect of the fundamental objective of the AI requirement (see Introduction)
- require students to work with primary source documents
- require students to reflect and thereby
    o make connections between their work in the course and other academic work they've done
    o make connections between their work in the course and their own lives
    o make connections between theoretical and practical applications of the work they've done in the course
    o relate the work they've done in the course to SLCC's General Education learning outcomes

COMMUNICATION (CM) [Designation updated Spring 2017]

Communication (CM) courses focus on the study and application of principles and skills in verbal, nonverbal, written, visual and/or multi-modal forms of communication, focusing on the construction of shared meaning. CM courses combine the study of communication theory and/or disciplinary epistemologies with hands-on practice. These courses engage students in the production of critical thinking and analysis, argumentation, and other communicative acts that enrich human relationships, and that ground the epistemologies within our professions, disciplines and/or the public sphere. While all General Education courses have communicative and reasoning elements, CM courses center specifically on the systematic study and production of communication and reasoning as generalizable human activities or within epistemologies specific to a discipline.

LEARNING OUTCOMES
Upon completing a Communication (CM) course, students will be able to:
- Critically consume communicative practices by analyzing their production, reception, circulation, contexts, and methods.
- Recognize and use rhetorical strategies
- Identify and evaluate the nature of communication and reasoning distinctive to the course's discipline, profession or sphere of inquiry.
- Competently reason and communicate in the modalities central to the course.
- Effectively adapt communication and reasoning practices to different audiences and disciplinary discursive norms.
- Recognize communicative and reasoning biases and assumptions (their own and others'), and their effects on personal, professional, and civic communication practices.
- Critically and effectively produce extended, in-depth communicative work.

CRITERIA
Courses seeking Communication (CM) designation must address the following:
- The course title/description must reveal the communication and/or epistemological focus of the course.
- Curriculum documents must combine theoretical study of communication or epistemologies along with intensive application of those human activities.
- Curriculum documents must articulate rhetorical and epistemic elements of communication such as production and reception, modes of reasoning (e.g. scientific, technical, humanistic, legal, ethical), bias recognition, credibility analysis, contextual awareness, or design and data visualization.
- Curriculum documents must demonstrate rich application of critical thinking practices, such as generative, comparative, interpretive, evaluative, qualitative, and/or synthetic analysis; logical, sequential, ethical, scientific and/or creative reasoning; analytical and holistic problem-solving strategies; and applying information literacy best practices.
- Curriculum documents must demonstrate that students participate in sustained individual and collaborative engagement with meta-cognitive and iterative processes related to generation, revision and production of communication modalities central to the course.

PEDAGOGICAL GUIDELINES
Communication (CM) courses should emphasize:
- Reading and discussion of texts that theorize communication modalities or epistemologies

central to the course. This may include, but not be limited to, theories of problem-solving, team decision-making, conflict management, knowledge-making and circulation.
- Activities that center on active learning— e.g. simulations, case studies, role-plays, peer review,
collaborative work, situation analysis, mini-projects, dialog practice, presentations, interactive discussions, etc.
- Reflection for connection-making across disciplines, to the wider world, and to students' own lives.

DIVERSITY (DV)

First: The proposed course must meet General Education Distribution Area or Institutional Requirement criteria. Second: The course proposal must demonstrate the following:

COURSE CONTENT
The proposed course must embody at least a majority of the following diversity topics:
- Focus on topics of diversity within the complex system of U.S. society.
- Focus on a group which faces unique challenges in relating to U.S. society as a whole, including such topics as acculturation, stereotypes, bigotry, inequitable treatment,etc.
- Defines, analyzes, and challenges social structures which cause problems for groups in U.S. society.
- Applies concepts in diversity and/or multiculturalism specifically to training in a particular field of academic interest/study.
- Explores the dynamics of such social issues as social or ethnic discrimination (e.g., racism, sexism or cross-cultural interaction, etc.).
- Methods of moving toward a more tolerant society are examined critically. Experiences and relations of topic groups and their relations with U.S. society are used to assess the problems and benefits of a multicultural society.
- The concept of diversity is explored and its definitions challenged, with students examining its application to their lives and to U.S. society.

METHODS
All of the following should be inherent in the didactic structure of the proposed course:
- The course is designed to be an open forum for the expression of ideas.
- Students with views that are contrary to the belief of the faculty (or even the intended result of the course) are expected to support their views with information gained in the course, but are not
academically punished or rewarded for their views.
- The course is based on critical analysis, rather than opinion and factual knowledge.
- The course presents facts from multiple and opposing perspectives so that students can formulate
educated opinions.
- Students should have opportunity to synthesize information and opinions formed by drawing parallels to their own lives/experience.

MISCELLANEOUS
All of the following should be met, where applicable:
- A course including both the study of non-dominant groups and global circumstances must

systematically link the two with the global perspectives offered to enhance understanding of U.S. social dynamics.

- A course studying artistic production of non-dominant cultures should include the study of the relations between art and the culture of the group.
- If the main focus of the course is historical in nature, the course should explore current social circumstances of the group as a result of historical events.
- Courses studying one specific cultural group should not allow an understanding of that specific group and its circumstances to be an end in itself, but a tool with which to examine the greater U.S. social dynamic.

COMPOSITION (EN) [Designation updated Spring 2017]
Salt Lake Community College's Composition (EN) requirement provides students with transferable knowledge about reading and writing and develops students' metacognitive awareness of themselves as readers and writers. EN designated course curricula construct a foundation of knowledge, skills, and practices that students apply as they encounter writing experiences across the college curriculum and in the workforce. This requirement is in accordance with Utah State Board of Regents Policy 470-3.2.1.

LEARNING OUTCOMES
Upon completion of the Composition (EN) requirement, students will be able to:
- Use rhetorical analysis to flexibly and effectively respond to the purposes, audiences, and contexts surrounding diverse writing tasks.
- Critically access, interpret, develop, and/or utilize appropriate, relevant, and compelling content through the ongoing practice of analyzing, synthesizing, interpreting, and evaluating ideas, information, situations, and texts across diverse reading and writing tasks.
- Demonstrate detailed attention to and successful execution of genre conventions particular to specific writing tasks, including organization, content, presentation, formatting, and stylistic choices.
- Make skillful information literacy choices in their selection, interpretation, and use of sources relevant to their writing tasks.
- Develop written texts that successfully communicate meaning to readers.
- Understand, analyze, navigate, and adapt their own iterative reading and writing processes and practices (e.g. generation, revision, production) in independent and collaborative writing tasks.

CRITERIA
Courses seeking Composition (EN) designation must address the following:
- The course title/description must reveal the written communication focus of the course.
- The meta-cognitive development of emerging writers is the primary topic of the course, though it may follow specific theme or focus.
- Curriculum documents must demonstrate:
  o The transferability of writing knowledge acquired in the course to other writing tasks/situations.
  o Rich application of critical thinking, reading and writing learning practices.
  o The iterative nature of learning and scaffolded instruction in reading and writing.
  o Varied forms of formative and summative assessment.
  o Multiple and layered opportunities for post-evaluative revision of assignments.
  o Robust opportunities to develop metacognition and reflection upon students' thinking

and language use as readers and writers.

PEDAGOGICAL INSTRUCTIONS
Composition (EN) courses will emphasize the following:
- Provide a robust variety of diverse reading and writing assignments that engage students in multiple writing processes, including heuristics, drafting, feedback, revision, and editing.
- Engage students in close critical reading of texts as occurring with rhetorical situations and within genres.
- Engage students in extended practice negotiating new and diverse reading and writing situations and tasks that require their adaptation to shifting expectations and demands.
- Include multiple, multi-stage writing assignments that require drafting, feedback, revision and editing.
- Individually adapt instruction and pedagogies to the varied discursive needs of different students as they develop as writers.
- Provide individualized, multi-layered/multi-modal, formative and summative instructor feedback and evaluation on all assignments.
- Predominantly use active learning practices – e.g. Class discussion, Interactive lecture, Inquiry based learning, Argumentation/debate, Group problem solving, Multi-step group projects, Peer Review, Collaborative work.
- Include substantial sustained individual and collaborative engagement with meta-cognitive and iterative processes related to generation, revision and production of written communication.
- Incorporate reflective writing and discussion for connection-making across disciplines, to the wider world, and to students' own lives.
- Engage students—through the e-portfolio signature assignment—in reflection upon the transferability of writing knowledges developed in the course to other writing situations/tasks in their other courses and in their own lives.

FINE ARTS (FA) [Designation updated Fall 2017]
Courses in the fine arts (FA) connect the arts and society, providing avenues to understand and engage with the artistic expressions of humanity. Such courses seek to foster critical and creative interpretations of artistic expression. Fine Arts (FA) courses help students develop critical, creative, and interpretive skills needed to function in an increasingly diverse world and contribute to society as educated and informed citizens.

LEARNING OUTCOMES
Upon completing a Fine Arts (FA) course, students will be able to:
- Recognize the aesthetic standards used in making critical and creative judgments in the arts
- Analyze, understand, and articulate creative processes and how the creative process can inform non-artistic endeavors
- Use the artistic process and forms of artistic expression to depict and express human experience, emotions and thought, by means of verbal, visual and aural images, metaphors and design

CRITERIA
Courses seeking Fine Arts (FA) designation must address the following:
- How the course specifically addresses the following college-wide student learning outcomes

that every Fine Arts course should include:
- o Communicate effectively
- o Think critically and creatively
- o Work with others in a professional and constructive manner
- o Note: FA courses could and often will address other college-wide student learning outcomes as well.
- How the course will be pertinent and thought provoking for students across disciplines, including those outside of the fine arts
- How the content of the course introduces students to ways of experiencing and understanding a variety of artistic concepts, structures, and forms.
- How the content of the course helps students explore the world through varying aesthetic viewpoints.
- How the content of the course introduces students to critical and creative interpretations of artistic expression.

PEDAGOGICAL GUIDELINES

Fine Arts (FA) courses should emphasize the following:
- High impact practices that are often effective in a Fine Arts course including Active learning activities, Group activities and discussions, Peer evaluation, Analyzing and emulating model works, and/or Integration and application of knowledge and skills.
- The tools and experiences students need in order to engage in integrative or interdisciplinary thinking and application, in other words, how the knowledge and skills learned will be useful in other disciplines.

HUMAN RELATIONS (HR)

Human Relations courses take a broad view of human interaction. All students have responsibilities to themselves, their families, their employers and co-workers and their communities. Every student, regardless of program of study, is part of one great social web. Human Relations courses present theories to explain the connections of and the skills needed to function within the social web. They will practice these skills in real-life scenarios.

CRITERIA:
- Theoretical Substance – Students will study a broad range of theories about human interaction including theories from sociology, psychology, professional ethics, systems (may include family, organization, professional, regulatory systems).
- Intrapersonal & Interpersonal Skills – Students will learn strategies for leadership, mentoring, goal setting, teamwork, negotiation, understanding personal values, networking, conflict resolution, empathy, group dynamics, self-evaluation, and work vs. personal conflict.
- Social Web – Students will gain a greater understanding of their active role in society beyond the workplace including pluralism, civics, ethics and values, social/political implications of knowledge and actions, emphasizing the worth of the individual, understanding societal/ethical implications of change, appreciation of multi-culturalism and benefits of diversity in society.
- Diversity – Students will critically examine the historical contexts, contributions of and challenges confronting diverse groups within our multicultural society of the US; inclusion in society and the workplace of all groups: including, but not limited to, race, ethnicity, gender, sexual orientation, age and religion.
- Critical thinking – Students will learn comparative, constructive, ethical thinking; holistic

problem-solving strategies; evaluating evidence and sound judgment; quantitative and qualitative analysis and scientific and creative thought; synthesis; logic; sequential reasoning. Students will learn to recognize their own biases and how they affect judgment.

APPLICATION: Exercises will be discipline specific, with material applied to student career interest.

METHODS:
- Work with people—service learning, or cooperative education, etc.
- Role-plays, group work, etc.
- Experiential component—job-shadowing, interviews, professional organization meetings, etc.
- Reading and discussion of texts; written assignments.
- Team teaching is encouraged, or at least team development of curriculum and shared oversight to ensure GE and CTE needs are being met.

HUMANITIES (HU) [Designation updated Spring 2017]
Humanities courses focus on the study of how people understand and express human experience, and how human experience shapes our understandings of ourselves and the world. Focusing on the literary, philosophical, artistic, religious and/or linguistic expressions of individuals, past and present, the Humanities explore the underlying quality of cultural products, and what that quality tells us about the values, ideas, and meaning-making practices of individuals and their culture, as well as our own. Courses in the Humanities primarily use the tools of interpretation, critical analysis and evaluation of primary sources: texts, performances, art symbols, cultural and historical systems, and/or other forms of expression. Their methods employ historical interpretation, rhetorical, literary, aesthetic and philosophical analysis, as well as the cultivation of style, creativity and imagination as part of an analytical framework.

LEARNING OUTCOMES
Upon completing a Humanities (HU) course, students will be able to:
- Derive evidence from primary sources regarding the complexities and changes inhuman experience and understandings through analytical reading and critical reasoning and evaluation.
- Describe and critically analyze how human experience, values and understandings, and conceptual frameworks regarding self and world are shaped by human agency along with social, cultural, linguistic, technological, and/or historical circumstances; and vice versa.
- Demonstrate attentiveness to the ways language, images, or acoustic media communicate meaning.
- Demonstrate appropriate use of verbal, perceptual, or imaginative skills when organizing meanings, developing a sense of self, and balancing potentially disparate values.

CRITERIA
Courses seeking Humanities (HU) designation must
- Focus on cultural and intellectual expressions through historical, philosophical hermeneutic, cultural and/or aesthetic investigations.
- Situate the events, customs, values and symbols of people throughout time in their appropriate cultural contexts.
- Attend to the development of critical analysis skills: the tools to assay essential features and qualities of cultural products in order to analyze and evaluate the historical, cultural, literary, moral, and/or linguistic forces that shape and are shaped by them.

- Further the development of verbal, perceptual, and imaginative skills needed for organizing and understanding our world in communicable ways.
- Cultivate attentiveness to written words, auditory and visual expressions, careful consideration of multiple perspectives, thoughtful balancing of complementary and sometimes contradictory values, coaxing forth of disparate meanings, and responsiveness to the complexities of sense.

PEDAGOGICAL GUIDELINES

Humanities (HU) courses should emphasize:
- Close reading and interacting with primary materials – texts, performances, art symbols, auditory materials, etc. – rather than only reading a textbook or listening to lecture.
- Classroom discussion, with students expected to participate actively in the classroom and develop their critical thinking skills.
- Comparison, analysis, and a concern with connections between particular texts and their social and historical contexts, with relationships among the various arts, and with links to other disciplines that explore the human condition.
- The use of language and evidence effectively for purposes of critically evaluating forms of reasoning and constructing an argument.
- A complex, honest engagement with ideas and deep questioning.
- Written assessments, both of the course materials and of students' own thinking (metacognition).

INTERNATIONAL AND GLOBAL LEARNING (IG) [Designation added Spring 2017]

International and Global Learning (IG) courses focus on the world beyond the United States. The terms international and global address different aspects of what are distinct, but often interrelated objects of social complexity.
- International courses provide a broad base of knowledge about two or more countries in a comparative and/or interpretive context, and may focus on their interactions, exchanges, relations, perspectives, cultures, communications, historical developments, political and/or economic systems, geography, educational processes, etc.
- Global courses focus on the interconnected and interdependent issues that transcend all national borders and function worldwide, such as natural and environmental matters, social issues, culturally-created phenomena, and technology.

LEARNING OUTCOMES

Upon completing an International and Global Learning (IG) course students will be able to:
- Use a comparative and/or interpretive framework to examine the dynamics of power and how it shapes such issues as knowledge, privilege, gender, economies, religion, environment and/or race relations.
- Use quantitative and/or qualitative analytical skills to understand the inter-connectedness, interdependence and/or complexity of international and global systems.
- Employ discipline specific approaches/methods in critically examining international and/or global issues, processes, trends, events, structures, etc.
- Analyze at least one of the world's most pressing issues through critical reasoning and creative thinking, with an emphasis on developing collaborative and equitable solutions and processes.
- Demonstrate an understanding of the complexities of identity, including how deeply rooted identity is in culture, language, religion, race/ethnicity, geography and/or relationship to power.

- Communicate effectively in oral and/or written form about topics beyond—or transcendent of—the borders of the United States, or about the United States in a comparative and/or interpretive framework.
- Make skillful information literacy choices in the selection, interpretation, and use of sources relevant to the course assignments and activities.

CRITERIA
Courses seeking International and Global Learning (IG) designation must address the following:
- The course title and/or description must reveal the international/global nature of the course.
- Curriculum documents for each IG course must be explicit with regard to the specific focus demonstrated between and among international and global phenomena. For example, the course syllabus should specify if the course is global, international or both in content.
- Curriculum documents must describe and explain how the course readings, teaching methods, and assignments add to student knowledge regarding the international/global topics addressed by the course.
- An international course that focuses in part on the United States must include two or more additional countries, and cannot allot more than one-third of its time and other resources [i.e., readings and assignments], to the U.S.

PEDAGOGICAL GUIDELINES
International and Global Learning (IG) courses should emphasize:
- Reliance upon coherent themes, theoretical perspectives, and/or analytical frameworks to provide continuity throughout the course.
- Substantive knowledge-based assignments or projects.
- Class discussions and/or other collaborative activities.
- Work with primary source documents and/or authentic texts.
- Reflection in oral and/or written form that makes cross disciplinary connections and/or explores the relevance of course content to the wider world and students' personal lives.
- Opportunities, when possible, for students to become engaged outside of class with international and/or global communities or issues. This may include, but is not limited to, service-learning activities.

LIFELONG WELLNESS (LW)
The Lifelong Wellness designated courses are the physical component of the mind/body connection of the student. Good health is critical to a person's quality of life. The instruction given in these courses emphasize the connection between being physically active and good health. These courses require active participation so students will develop skills in the various fitness, sport, or leisure activities that will be used for life.

CRITERIA:
- Students will learn the importance of physical activity and its connection to lifelong wellness.
- Students will learn and experience that participation in a fitness, sport or leisure activity results in daily benefits including: stress reduction, endorphin release, a sense of well-being, etc...
- Communication – Students will practice speaking and listening in understanding, practicing and refining motor skills.
- Critical Thinking – Students will learn to anticipate, strategize, and problem solve as they

participate in the physical activity.
- Personal Growth
    - Students will learn self-discipline from pushing through challenging activities.
    - Students will learn to set goals and strive to achieve those goals.
    - Students will gain understanding of themselves in how they react to demand placed on them in a sport setting.
    - Students will learn skills in ethics, etiquette, and teamwork.

METHODS:
- Each course is an activity class which requires motor skill practice.
- Each course has a required text which will be used in student evaluation.
- Each course requires either a written log recording the student's workout
- Information for the fitness activity, or a written journal chronicling the student's progress in mastering the leisure activity or sport.

LIFE SCIENCES (LS) [Designation updated Spring 2015]
The Life Sciences (LS) comprise the scientific fields involved with the study of living organisms. The goal of a life sciences course is to provide students with an understanding and appreciation of the natural world from a scientific perspective. Salt Lake Community College's Life Science requirement is meant to ensure, in accordance with the Board of Regents Policy R-470 that students are prepared for the 21st century having gained knowledge and proficiency about the natural world. The fundamental objective of this requirement is to provide students with the knowledge and skills necessary for informed and responsible citizenship. Specifically, students shall demonstrate a reasonable understanding of the scientific process, the unifying principles of the life sciences and the human connection to the natural world.

LIFE SCIENCES LEARNING GOALS
- Upon completing a Life Sciences general education course, students should be able to demonstrate a reasonable understanding of the general principles of science:
    - Scientific knowledge is based on evidence that is repeatedly examined through the scientific method and can change with new information.
    - All natural phenomena are interrelated; hence scientific explanations obtained from different disciplines should be cohesive and integrated.
    - Science relies on empirical data, and such data must be analyzed, interpreted, and generalized in a rigorous manner and then communicated effectively using discipline related terminology.
- Upon completing a Life Sciences general education course, students should be able to demonstrate substantive knowledge of the following unifying principles:
    - The organization of life that is based on molecules and cells and extends to organisms and ecosystems.
    - The chemical and physical nature of life and the applicability of physical laws.
    - The inheritance and continuity of life.
    - The interactions and inter-dependency of organisms upon each other and their environment.
    - The patterns and processes of evolution that explain the unity and diversity of life.
- Upon completing a Life Sciences general education course, students should be able to

demonstrate how scientific inquiry has made significant impacts on and increased understanding of
- o Society, including technological advancements.
- o Improvements to human life.
- o The consequences of interactions among all living organisms, including humans, and their environment.

PHYSICAL SCIENCES (PS) [Designation updated Spring 2018]
Physical Sciences (PS) courses focus on our understanding of the natural world and its physical components using the methods of science. Students will recognize physical phenomena of the everyday world and use appropriate methods and techniques to develop scientific knowledge and understanding. Courses will focus on assessing the credibility of scientific information and will use concepts of physical science to understand physical events and solve daily problems.

LEARNING OUTCOMES
Upon completing a Physical Sciences (PS) course, students will be able to:
- Demonstrate an understanding of science as a way of knowing about the physical world, specifically that:
  - o scientific knowledge is based on systematic observations and testable hypotheses and scientific understanding can change as new evidence becomes available,
  - o all natural phenomena are interrelated and every natural effect has a corresponding cause; and
  - o students think critically and are able to apply scientific reasoning to their understanding of the physical world and about data and conclusions that are presented to them.
- Demonstrate understanding of forces in the physical world and/or discuss the flow of matter and energy through systems (in large and small scales) as a consequence of natural laws.
- Demonstrate ability to interpret data in the form of tables, graphs, maps, and/or charts and then communicate those findings in oral and/or written form.
- Describe how the Physical Sciences have shaped and been shaped by historical, ethical, and social contexts.

CRITERIA
Courses seeking Physical Science (PS) designation must address the following:
- The course title and/or description must reveal the area of focus or specific discipline within the physical sciences.
- Course documents must illustrate how the course topics and course learning outcomes address each of the Physical Sciences learning outcomes above.

PEDAGOGICAL GUIDELINES
Physical Science (PS) courses should emphasize:
- Quantitative reasoning such as calculations or statistics.
- Measurement techniques, including an understanding of error in measurement.
- Data collection, data analysis, and critical thinking to draw conclusions.
- Data visualization such as graphing, mapping, or other methods or techniques.
- Use of models to conceptualize and make predictions.
- Reflection on course material that makes cross disciplinary connections and/or explores the relevance of course content to the wider world or students' personal lives.

QUANTITATIVE LITERACY (QL) [Designation updated Fall 2019]
In-depth collegiate-level mathematics courses covering general mathematical concepts, general algebraic techniques, and a plethora of their applications to many different subjects, e.g., social and behavioral science, nursing, chemistry, biology, finance, economics, statistics, probability, engineering, physics, etc. This is in contrast to more specific-subject, QS-type courses. QL courses involve learning parts of general bodies of mathematics, e.g., arithmetic, algebra, statistics, or calculus, and then applying these beyond a mere specific subject's routine applications (this is in line with USHE R470 3.2.2 (7)).

LEARNING OUTCOMES
In line with the Mathematical Association of America (MAA), upon completion of a Quantitative Literacy (QL) course, students will be able to:
- Think abstractly (in line with USHE R470 3.2.2 (1)) – QL courses involve learning a multitude of
  abstract mathematical concepts, theorems, and techniques throughout an entire semester; such courses require a basic-level understanding of not just how, but also why, such mathematical theorems and techniques are valid. Students will utilize and demonstrate their mastery of these abstract conceptual tools to solve many abstract/general mathematical problems.
- Model using mathematical equations and formulae (in line with USHE R470 3.2.2 (2 & 6)) – QL
  courses involve analyzing and modeling a broad range of phenomena from various subjects. Students will set-up (translate) contextual problems into accurate mathematical expressions and equations, i.e., use mathematics itself as an expressive and descriptive language, and students will perform valid abstract symbolic manipulations of many variations, from the learned abstract
  theory above, in order to solve application-based problems.
- Estimate solutions using numerical methods (in line with USHE R470 3.2.2 (3)) – QL courses include learning various solution-estimation methods and developing greater numerical sense. Students will demonstrate how to apply numerous estimation routines and will interpret their results within a given problem's context. They will further assess a solution's reasonableness and even recognize some of the limitations of mathematical methods.
- Solve problems using geometric methods (in line with USHE R470 3.2.2 (2)) – QL courses involve
  learning various formal graphing techniques of general relations and functions, and other geometric-depiction methods. Students will demonstrate how to represent information and/or data not only symbolically, but visually by creating various graphs, charts, plots, diagrams, schematics, etc.
- Think logically– (in line with USHE R470 3.2.2 (5)) Students will demonstrate valid deductive reasoning and sound abstract mathematical argumentation, parts of intellectual competency at a collegiate level. QL courses emphasize the importance of mathematics in the world, how it applies to various fields to help students become aware of "mathematical applications across the curriculum," and foster an attitude of basic appreciation of mathematical processes, mathematical precision, and mathematical certainty.
- Synthesize mathematics as it pertains to problems (in line with USHE R470 3.2.2 (6 & 7)) - E-portfolio Project – QL courses have a required e-portfolio project. Students are assigned a course's "signature assignment" to put in their student e-portfolios. Here students will

demonstrate the "rule of four," algebraic, geometric, numeric, and verbal skills, within the course's mathematical objectives, both abstract and applied.

CRITERIA
Courses seeking Quantitative Literacy (QL) designation must meet the following:
"While colleges and universities should strive to ensure that every college graduate has achieved quantitative literacy, departments of mathematics must accept responsibility for establishing and providing a focused quantitative literacy program within their institutions and seeing that it is maintained in a suitable manner" (MAA; see maa.org). "Students may satisfy the QL requirement by completing at least one institutionally-approved mathematics course that clearly demonstrates quantitative reasoning skills beyond those found within required high school Mathematics courses and that is an appropriate introductory university level" (see USHE R470 3.2.2).

PEDAGOGICAL GUIDELINES
Quantitative Literacy (QL) courses should follow the following guidelines:
The MAA sets a standard that "every college graduate should be able to apply simple mathematical methods to the solution of real-world problems. A quantitatively literate college graduate should be expected to have deeper and broader experiences than those who only graduate from high school. The level of sophistication and maturity of thinking expected of a college student should extend to a capability for quantitative reasoning that is commensurate with the college experience. College students should be expected to go beyond routine problem solving to handle problem situations of greater complexity and diversity, and to connect ideas and procedures more readily with other topics both within and outside mathematics."

QUANTITATIVE STUDIES (QS) [Designation updated Spring 2023]
Salt Lake Community College's Quantitative Studies (QS) designation is to be used for mathematics-based courses for specific field (career and trade-technical) applications. These courses satisfy General Education requirements for programs leading to AAS degrees and certificates. The QS designation contrasts with broader collegiate-level mathematics courses, which includes QL designated courses and cover learning general bodies of more advanced, abstract, rigorous mathematics with a multitude of applications, possibly spanning various fields, e.g., Math 1050, College Algebra.

LEARNING OUTCOMES
Upon completion of a Quantitative Studies (QS) course, students will be able to:
- Think Critically – Students will demonstrate deductive reasoning (logic) through problem-based technical applications of mathematics to analyze their specific field's pertinent problems and data, to identify common solution-methods in their field, and to assess their results for errors and cogency.
- Perform Area/Field-Specific Mathematical Problem Solving - Students will demonstrate adding, subtracting, multiplying, and dividing integers, decimals, fractions, orders of operations, working with exponents, typically with and without the use of technology, solve proportions and percentage problems, and solve for simple unknowns, by carrying-out specific memorized mathematical processes and/or algorithms.
- Communicate Effectively – Students will translate field-specific problems into basic mathematical models (setting-up the problems) and accurately interpret and explain their results in context using natural language, e.g., English.

- Utilize Conceptual Theory – Students will understand number sense, estimating values, recognize how to apply basic mathematical concepts to their field, demonstrate a basic understanding and intuition of why specific memorized mathematical processes work, and be able to explain and cite specific examples of the vast application of mathematics in their field, and gain a deeper appreciation for use of mathematics.
- Utilize Visual Interpretations – Students will create, read, and interpret various charts, graphs, and symbols commonly used in their specific field.
- Use Relevant Technology – Students will learn to operate appropriate field-specific measuring devices, tools, equipment, and/or software.
-

CRITERIA

Students may satisfy the QS requirement by completing at least one institutionally approved QS course. Each course seeking to satisfy a QS designation typically must:
- Clearly demonstrate quantitative reasoning skills found within a specific field.
- Develop and/or utilize mathematical techniques in a field consistently throughout the entire course. Such a course is essentially a basic, applied mathematics course within a specific field, not merely a course in which occasional graphs are consulted and/or occasional computations are conducted.
- QS courses are usually crafted by individual programs to meet their program's needs; however, Math 1010 satisfies QS traditionally being a more advanced course. Moreover, institutionally approved QL courses (e.g., Math 1030, 1040, 1050, 1060, 1210), or any college-level mathematics course (starting at Math 1010) fulfill QS, e.g., Math 1220, 2210.

Note- A QL designated course can substitute for a QS, but a QS cannot substitute for a QL.

PEDAGOGICAL GUIDELINES

Each Quantitative Studies (QS) course will:
- Be taught focusing the pedagogical standards of their specific field.
- Engage students through the e-portfolio signature assignment that highlights communication aspects of the specific field.
- Make connections with their course work and their field.

SOCIAL SCIENCES (SS) [Designation updated Spring 2021]

Courses in social sciences use theoretical approaches and empirical methods to explore individual and collective human behavior. They introduce students to how social science disciplines employ testable propositions and systematic methodologies that seek to describe and explain social reality, including interpretive investigations, experiments, quantitative and qualitative analyses, case studies, typologies, and investigations of primary source documents. If students take only one social science course, they should know that social scientists use scientific inquiry to reach their conclusions.

LEARNING OUTCOMES

Upon completing a Social Science (SS) course, students will be able to:
- Describe the complexity of human experience—including individual behavior and the institutions
- humans construct to organize that behavior—from a particular social science disciplinary perspective.

- Formulate basic questions about human behavior and social institutions.
- Explain the diversity and commonality of the human condition from a particular social science disciplinary perspective and with respect to concepts such as race, gender, power, identity, social change or continuity, and the relational self.
- Apply social science disciplinary theories, concepts, and methods to the understanding of human
  behavior and institutions.
- Develop and defend conclusions about human behavior and institutions that are empirically derived and theoretically informed.
- Discuss and assess the ethical issues social scientists encounter when conducting research.
- Recall or identify the concepts, personalities, events, and sequences that are relevant to a particular social science discipline.
- Describe the nature of the social sciences and their similarities to and differences from other disciplinary groupings such as the natural sciences and the humanities.

CRITERIA
Courses seeking SS designation must address the following:
- The course title and/or description must reveal the area of focus or specific discipline within the social sciences.
- Course documents must illustrate how the course topics and course learning outcomes address the social sciences learning outcomes above.
- Curriculum documents must describe and explain how the course readings, teaching methods, and
  assignments add to student knowledge regarding a defined social science discipline.

PEDAGOGICAL GUIDELINES
SS courses should emphasize:
- Big questions of the social science disciplines that are contemporary, historical, and/or enduring.
- Reliance upon data, coherent themes, theoretical perspectives, and/or analytical frameworks to provide continuity throughout the course.
- Substantive knowledge-based assignments or projects.
- Writing-to-learn and/or traditional writing assignments.
- Class discussions and/or other collaborative activities.
- Working with primary source documents and/or authentic texts.
- Reflection in oral and/or written form that makes cross disciplinary connections and/or explores the relevance of course content to the wider world and students' personal lives.

Appendix B

GENERAL EDUCATION LEARNING OUTCOMES (April 2023)

Students communicate effectively. This includes developing critical literacies—reading, writing, speaking, listening, visual understanding—that they can apply in various contexts; organizing and presenting ideas and information orally, visually, and in writing for various purposes and audiences; understanding and using the elements of effective communication in interpersonal, small group, and mass settings.

Students develop quantitative literacies necessary for their chosen field of study. This includes interpreting, calculating, and communicating with quantitative evidence; collecting, interpreting, analyzing, and visualizing data.

Students think critically. This includes reasoning effectively from available evidence; taking imaginative and complex positions in their work; engaging in reflective thinking and expression; demonstrating higher-order skills such as analysis, synthesis, and evaluation; problem solving; and applying interdisciplinary and scientific methods to the inquiry process.

Students express themselves creatively. This includes engaging in the creative process to produce unique artwork, designs, or performances; analyzing, interpreting, and critiquing creative works; and producing a unique and professional General Education ePortfolio.

Students develop civic literacy and the capacity to be community-engaged learners who act in mutually beneficial ways with community partners. This includes producing learning artifacts indicating understanding of the political, historical, economic or sociological aspects of social change and continuity; thinking critically about—and weighing the evidence surrounding—issues important to local, national, or global communities; participating in a broad range of community-engagement and/or service-learning courses for community building and an enhanced academic experience.

Students develop the knowledge and skills to work with others in a professional and constructive manner. This includes engaging with a diverse set of others to produce professional work, contributing to team meetings and performances, making individual contributions outside of team meetings and performances, fostering a constructive team climate, and creating fair and equitable roles based on team members' diverse backgrounds and skills.

Students develop information literacy. This includes the demonstrated ability to find, synthesize, assess, create, engage with, and cite information in a professional and ethical manner; to conceive that the research process is reflective and iterative; and to understand how information is produced and valued. These abilities and dispositions are rooted in the Framework for Information Literacy developed and adopted by the Association of College & Research Libraries (ACRL).

Students develop computer literacy. This includes demonstrating the ability to create, name, organize, save and retrieve data and/or information in an electronic file management system; Using online and electronic resources to communicate, collaborate, and retrieve information; Using a variety of technology to support personal, academic, and professional life-long learning and productivity; Determining when technology is useful and selecting the appropriate tool(s) and technology resources to address a variety of tasks and problems; Advocating and applying security principles and ethical behaviors when using technology and identify the consequences of misuse.