Report of the General Education Review Task Force

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Executive Summary

General Education at Oregon Tech is:

Aligned with Oregon Tech's mission, vision, and strategic plan

We maintain that Oregon Tech's vision for General Education must reflect the institution's overall principles, values, and goals. General Education is and must remain an integral part of Oregon Tech's mission, vision, and strategic plan.

Engaged with the Oregon Tech commkc DOGh&#4GOhiDOGn&bp&562150 /IOC

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Following a review of existing GEAC policies and procedures the Structures and Processes subcommittee determined the need for a better defined structure and committee organization to support the ongoing maintenance of general education at Oregon Tech. Major problems were identified that contributed the committee's inability to make substantive changes to general education over the past several years including:

no documented rationale for general education to serve as a foundation on which to base change;

no system of periodic review of general education;

a lack of continuity given high turnover in leadership and membership of GEAC;

GEAC was mostly tasked with looking at individual general education requirements, without a global vision;

a scarcity of institutional knowledge led to ongoing changes to policies and procedures;

GEAC had a perceived lack of decision-making power;

a lack of professional development for faculty serving on GEAC; and

a lack of designated support staff.

The subcommittee envisioned a governance structure that would connect GEAC to the work of existing committees to better leverage the scarce resource of faculty time and energy. The biggest connections emerged between general education (GEAC) and the following groups:

the Commission on College Teaching (CCT), which could be leveraged to provide and support faculty professional development focused on the general education program,

the Assessment Commission, which measures student learning and identifies opportunities for improvement both within programs and general education; and

the outcomes subcommittees created to redefine Oregon Tech's institutional student learning outcomes and recommend general education requirements to support these outcomes.

Given the Assessment Commission's already strong connection with CCT to deliver convocation workshops that support both bodies (and the institution), it was decided there needs to be a structure that more clearly aligns the work of the two committees. Given general education's (developing) clear association with institutional student learning outcomes, which form the basis of our institutional assessment work, alignment is not only reasonable but more

are the   efficient. And given CCT's mission of promoting excellence in teaching at the institution, it makes sense that the

pnd   C

Establish the Academic Excellence Coordinating Committee including the chairs of the three main committees and the Director of Academic Excellence.

Connect GEAC to Faculty Senate by including the chair of Academic Standards as a member of GEAC and providing regular general education reports at Faculty Senate meetings.

Establish release time for the chairs of the three main committees to focus on the needs of these three critical

Assessment Processes and Plan

The Outcomes and Assessment subcommittee also recommended changes to the academic assessment plan to formalize connections created with the new governance structure, connecting assessment findings to the work of CCT and GEAC to better support continuous improvement. The result is a six year continuous improvement cycle connecting ESLO assessment, professional development, and general education (Appendix

Top 10 Ranked Outcomes of General Education from Faculty, Student and Alumni Surveys

Faculty	Students	Alumni
Write clearly and persuasively		

key takeaways from the Institute included a recognized need for resources for sustainability, institutional reward structures, and communication strategies throughout the review process.

Rationale Development

The development of a rationale to support Oregon Tech's general education program was a main outcome of this review and was informed by both the internal and external reviews. The rationale which follows is unique to Oregon Tech and aligned with our mission (Appendix I). The first draft was presented at a Faculty-Administrator meeting on March 11, 2014 and the final version was the basis of the recommendations of the task force presented at the April 19, 2016 Faculty/Administrator meeting. The task force recommends that GEAC use the rationale as a guide when considering future changes to general education requirements.

Essential Studies Rationale

Given Oregon Tech's

 applied mission
 diverse student body composed of traditional and non-traditional, first-year and transfer, first-generation, low-income and legacy students
 history of rigorous professional preparation
 established focus on communication
 teaching-focused faculty
 innovative programs and general electives
 established culture of assessment
 excellent placement rates for graduates

and

 the rapidly changing nature of technology and the world, and
 the fundamental purpose of a university to educate students both broadly and deeply

Oregon Tech will ensure that students are equipped not only with the technical ability to influence and succeed in the world through a particular program of study, but that they will apply their skills and knowledge eloquently, responsibly, collaboratively, objectively, considerately, and in broad contexts beyond the major program.

Oregon Tech will provide students with ways to engage in lifelong and professional learning by developing their abilities to effectively

 communicate
 conduct inquiry and analysis in diverse fields
 practice ethical decision making,
 work with others
 reason quantitatively, and
 function individually and within diverse global and cultural systems.

In support of these outcomes, Oregon Tech will offer and maintain an Essential Studies program that

 is intentional and scaffolded
 is developmental with Essential Student Learning Outcomes (ESLOs) supported and demonstrated at the foundation, practicing, synthesis, and capstone levels

prepares active and educated citizens with a sense of personal and civic responsibility as well as a professional career

provides a broad education in areas outside of the major program allowing for personal growth, broad disciplinary learning, and exploration

allows students the freedom to choose from a variety of elective courses

includes upper-division coursework that may be required even for transfer students and is intentionally tied to lower division or transfer work

provides opportunities for interdisciplinary courses and co-teaching

incorporates high-impact practices supported by strong faculty professional development structures

uses a curricular design philosophy that ensures that all cognitive levels of Bloom's taxonomy are addressed at each level of achievement (foundational, practice, capstone) but that the difference between these outcome levels is the amount of scaffolding and instructor support

Inquiry and Analysis	Humanities and Social Sciences Natural Sciences
Ethical Reasoning	Humanities and Social Sciences
Teamwork	Communication
Quantitative Literacy	Applied Mathematics
Diverse Perspectives	Communication Humanities and Social Sciences

Relationship to Current General Education Requirements

The Essential Studies program maintains 47 credits in the university's current general education program, which is articulated in terms of distribution requirements:

Humanities ì 9 credits
Social Science ì 12 credits
Communication ì 18 credits
Natural Science ì 4 credits
Mathematics ì 4 credits

Accreditation and program constraints will ensure that programs have the necessary Math and Science to support their technical goals, alleviating the need for the math/science/social science block requirements in the current model. The

All courses in the Essential Studies program must be approved by GEAC to satisfy the criteria for the designated pathway and level of achievement.

<u>Foundation</u>

The foundation level provides a broad education in areas outside of the major allowing for personal growth and exploration. Foundational courses guide students via intensive work in a highly structured environment to learn new skills, gather tools, and acquire basic factual knowledge that supports the ESLOs. Assignments at this level are likely to be guided and scaffolded. Active learning is appropriate at this level.

The foundational level consists of a minimum of 29 credits taught by content area experts:

> Communication: 9 credits in written and spoken communication (WRI121, WRI122, SPE111)
> Inquiry and Analysis: 10 credits from the humanities, social sciences, and natural sciences (from a list of approved courses)
> Ethical Reasoning: a major program or major program-specified course must address ethical reasoning at the foundation level
> Teamwork: 3 credits (SPE221)
> Quantitative Literacy: 4 credits in statistics (MATH 243 or MATH 361)
> Diverse Perspectives: 3 credits (from a list of approved courses)

Courses at the foundation level may be approved to support no more than two pathways. Different courses must be used to satisfy the 29-credit minimum at this level. A single course may satisfy no more than one pathway.

<u>Practice</u>

The purpose of practice level courses is to build on foundational knowledge and skills through intensive work in continued general education, major coursework, and cross-disciplinary experiences. Assignments reflect moderate scaffolding, but students are learning how to work with unstructured/open-ended problems and situations. Students learn how to apply skills and tools in a moderately structured environment.

The practicing level consists of Essential Practice courses, Program-Integrated Practice courses, and an Essential Studies Synthesis Experience.

<u>Essential Practice</u>

Essential Practice courses provide a wide variety opportunities for advanced work in general education courses taught by content area experts. Students will demonstrate ESLO criteria beyond the foundational level.

The Essential Practice courses consist of a minimum of 15 credits in courses supporting

> Communication
> Inquiry and Analysis ì Humanities
> Inquiry and Analysis ì Sciences
> Ethical Reasoning
> Quantitative Literacy
> Diverse Perspectives

The task force recommends relying on established committees and processes to further develop details of the Essential Studies program within the spirit of the established rationale for general education. GEAC will be responsible for all Essential Studies course approvals and population of appropriate lists specified in the model. It is recommended to begin building lists with existing general education courses, then filling in critical gaps with new courses. The recently formed ESSE Council will further define parameters for the Essential Studies Synthesis Experience (initial description in Appendix L). In addition, the task force recommends creating an ad hoc Capstone Council to support programs in capstone development/adjustment to address baccalaureate level proficiency in all ESLOs. Detailed responsibilities for these committees and connections to the work of other groups will be further defined in the implementation plan in the following section of this report.

Timeline for Implementation

The task force proposes implementation of the Essential Studies program beginning with freshmen students in fall 2017. In order to meet the 2017-18 catalog deadline and scale-up for the first cohort the following timeline coordinating work from various committees is suggested. A detailed PERT chart and responsibility assignment matrix is located in Appendix M.

Spring 2016

Academic Excellence Coordinating Committee approve implementation plan, allocate resources, and recommend committee leadership/membership

GEAC pilot course approval process and plan for 2016-17 work

Transfer team develop plan and timeline for transfer work

Broadcasting & Marketing identify various audiences, create marketing plan and timeline for 2016-17 work

Summer 2016

Call for Essential Studies course proposals (foundation and essential practice)

ESSE Council attends WPI Institute on Project-B

Pilot ESSEs, gather feedback from faculty and students

CPC approve program curriculum maps and list of course approvals from GEAC

Advising training for new faculty to incorporate Essential Studies

Create Capstone Council to support programs in development/revision of capstone experiences

Spring 2017

GEAC begin approval of Program-Integrated courses and Capstone experiences

Visits to transfer institutions

Advisor training for all faculty

Plan for new student orientation

Plan for scale-up of ESSEs

Create Essential Studies website with connections to assessment and CCT

Develop student success metrics to assess effectiveness of the Essential Studies program (ESLOs, GPA, retention, NSSE, etc.)

Fall 2017

ESSE Institute to support new ESSE development

New student orientationĺ   kick off Essential Studies program

Advising freshmen in Essential Studies program

Continue scale-up of ESSEs and other practice level courses

Fall 2019

Essential Studies program fully implemented

Assess first cohort at junior level

Spring 2021

First graduates of the Essential Studies program

Assess student success at exit

Faculty—2 new faculty in the Humanities/Social Science department to support the Ethical Reasoning requirement; 1 FTE in interdisciplinary studies to support the development of the ESSE; may require additional faculty to support sufficient offering (re-evaluate in winter 2017); release time for chairs of Assessment, CCT and GEAC.

Professional Development— increased budget for CCT to support workshops; stipends for initial development of ESSES; budget for conference attendance for chairs of Assessment, CCT and GEAC; funds to support advisor training.

Director's Office—full-time support position; budget sufficient to support Essential Studies program.

Articulation and Transfer—temporary staff in Registrar's Office and Office of Academic Agreements beginning fall of 2016 (1 FTE).

In addition to these requested resources, the task force recommends in future planning the institution plan for interdisciplinary spaces for students and faculty.

The task force has explored external funding through grant opportunities and recommends NSF grants as potential funding to develop the ESSE. A group has been identified to support the Academic Excellence Coordinating Committee in developing a proposal.

Conclusion

The extraordinary level of participation and effort on the part of Oregon Tech faculty members over the past three years is evidence that we value general education. The Essential Studies program advances the goals of general education. Instead of experiencing general education as something to "get out of the way," students will see how general education is integral to an Oregon Tech education, is part of a meaningful learning trajectory, and helps prepare them for life beyond Oregon Tech.

With the approval of both faculty and administration the General Education Review Task Force respectfully submits these recommendations to the Provost.

From:

Appendix B: Programmatic Accreditation

| Respiratory Care Program |
|---|
| Commission on Accreditation for Respiratory Care (CoARC) |
| The curriculum must include content in the following areas: Oral and written communication skills, social/behavioral sciences, biomedical/natural sciences, and respiratory care. This content must be integrated to ensure achievement of the curriculum's defined competencies. Biomedical/natural sciences content must include human anatomy and physiology, cardiopulmonary anatomy and physiology, cardiopulmonary pharmacology, chemistry, physics, microbiology, and pharmacology. |
| Emergency Medical Services Program |
| Commission on Accreditation of Allied Health Education Programs (CAAHEP) |
| The curriculum must include content in the following areas: Oral and written communication skills, social/behavioral sciences, biomedical/natural sciences, and respiratory care. This content must be integrated to ensure achievement of the curriculum's defined competencies. Biomedical/natural sciences content must include human anatomy and physiology, cardiopulmonary anatomy and physiology, cardiopulmonary pharmacology, chemistry, physics, microbiology, and pharmacology. |
| Clinical Laboratory Science Program |
| National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) |
| No specific requirements for general education. |
| Dental Hygiene |
| Commission on Dental Accreditation (CODA) |

2-

Electrical Engineering Technology, Manufacturing Engineering Technology, Mechanical Engineering Technology, Computer Engineering Technology, Software Engineering Technology, Embedded Systems Engineering Technology

ABET Ì

COM

I&A

Ethics

Team

QL

DP
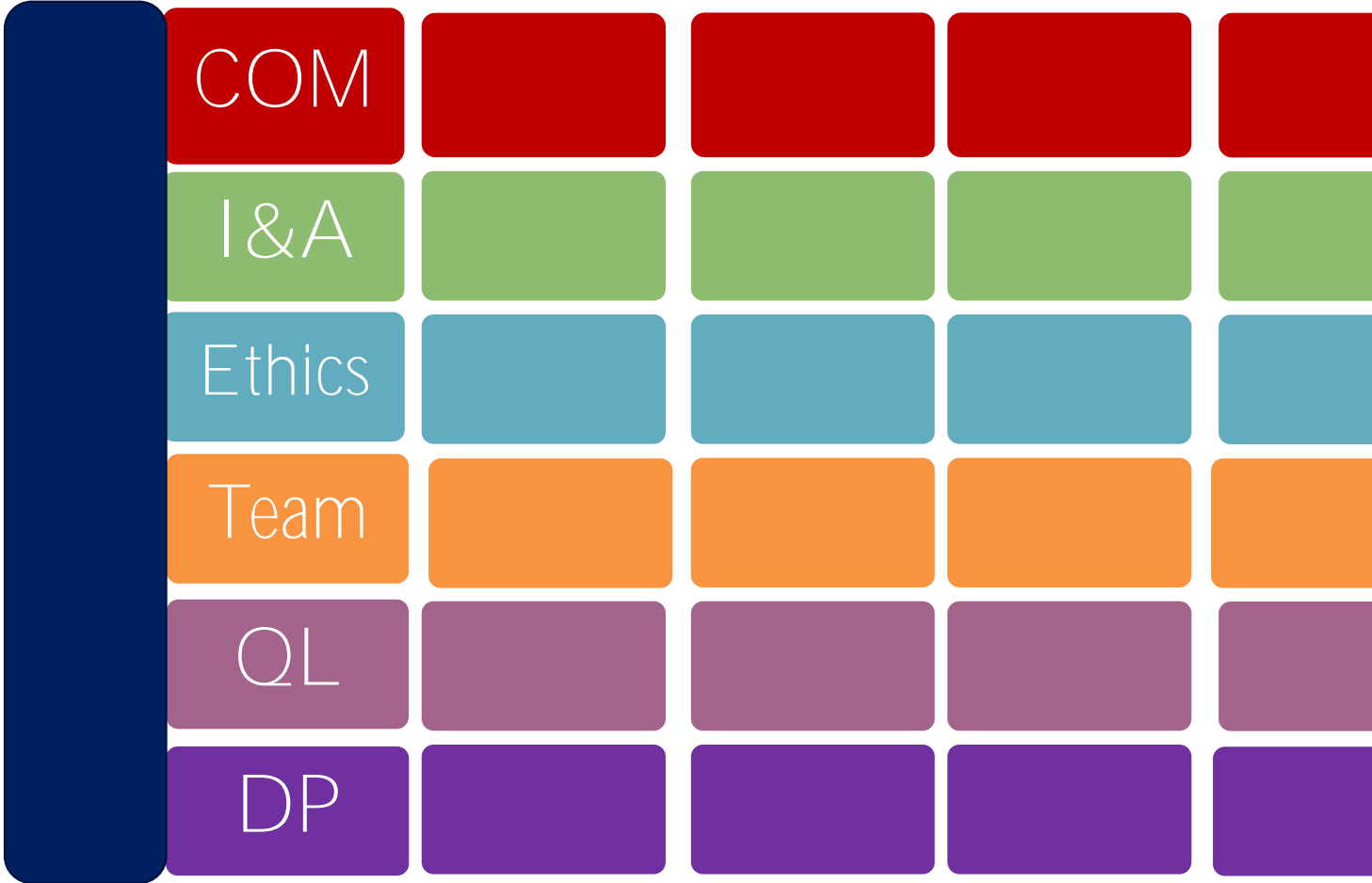
Appendix D: Essential Studies Course Approval Process

1. The following procedures apply for approval of, or changes to, Essential Studies courses.
2. The initiator will submit to CPC:
   a. New Course Request Form or Course Change Form
   b. Essential Studies Course Approval Form
   c. A complete and detailed syllabus including course outcomes
   d. A draft assignment designed to assess the designated ESLO criteria

Initiator

Department Chair

Curriculum
Planning
Commission

Essential Studies Course Approval Form

Course Title & Number_____

I.

a. How do students learn and practice the targeted ESLO in this course? Briefly describe how the course addresses each of the criteria checked in the targeted ESLO, including potential texts and course materials. (Attach detailed syllabus that includes course outcomes)

b. How do students demonstrate the appropriate level of proficiency in this ESLO? Briefly describe a significant assignment and student work appropriate for proficiency assessment in this ESLO, identifying how the assignment will require students to demonstrate each criteria you selected. (Attach assignment)

Department chair and dean signatures indicate proposal fits departmental and academic strategic plans and are willing to commit appropriate resources to support the proposed course. In addition, the department chair commits to ensuring course outcome alignment over all sections, locations and modes of delivery.

_____

Department Chair

_____

Dean

INQUIRY AND ANALYSIS

ESLO 2: Oregon Tech students will engage in a process of inquiry and analysis.

Definition

Inquiry and analysis consists of posing meaningful questions about situations and systems, gathering and evaluating relevant evidence, and articulating how that evidence justifies decisions and contributes to students' understanding of how the world works.

Criteria for Inquiry and Analysis Assessment

The following are criteria used in the assessment of student work:
Identify: Identify a meaningful question or topic of inquiry.
Investigate: Examine and critically evaluate existing knowledge and views on the topic of inquiry.
Collect: Design and execute a means of collecting evidence
Evaluate: Analyze evidence obtained in their investigation.
Conclude: Draw conclusions based on analysis of evidence; grasp the limitations and implications of their analyses.

ETHICAL REASONING

ESLO 3: Oregon Tech students will make and defend reasonable ethical judgments.

Definition

Ethical reasoning is the process of recognizing which decisions require ethical judgments, determin

ESLO 4: Oregon Tech students will collaborate effectively in teams or groups.

Definition

Teamwork encompasses the ability to accomplish group tasks and resolve conflict within groups and teams while maintaining and building positive relationships within these groups. Team members should

Appendix G: Six-Year Cycle and Work Plan for ESLO Subcommittees

Year 1: Design Assessment

Develop assessment plan identifying research questions targeting various levels of proficiency. The following tasks should be considered in developing the plan: review ISLO criteria, review ISLO mapping to the curriculum, develop or review rubrics, review past assessment reports. Set appropriate benchmarks for student attainment at various levels. Plan submitted to the Assessment Executive Committee for approval.

Year 2: Analyze Data

Aggregate and analyze data as defined in the assessment plan. Identify potential changes for continuous improvement considering both curricular changes and professional development. Submit written report summarizing findings to the

looking at innovative teaching and assessment practices at other institutions, exploring possibilities for collaborations and involvement in state and national projects, seeking opportunities for grant funding to support plans for innovation.

Continuous Improvement Cycle
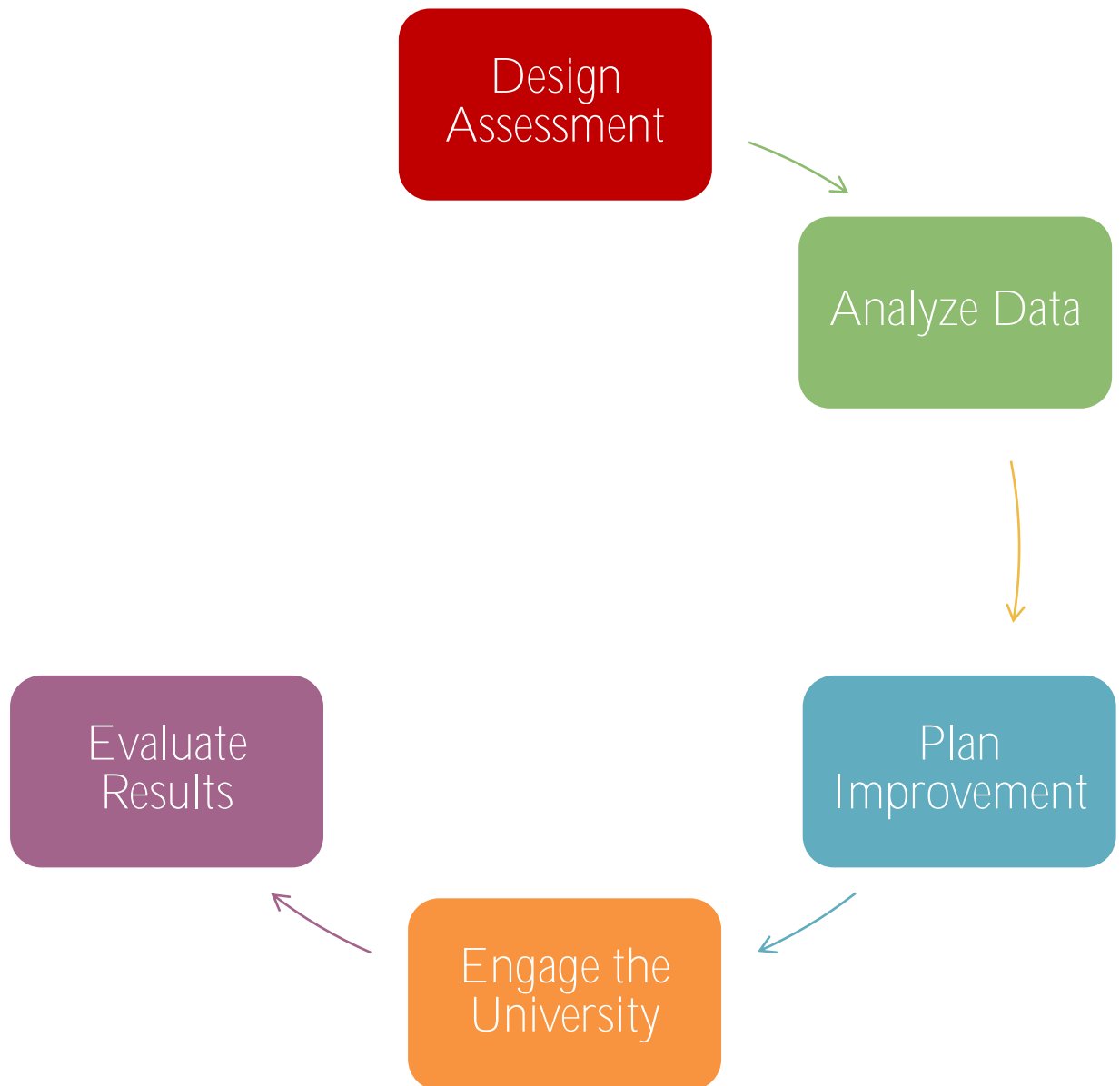
Appendix H: General Education Literature Review

Carlson, Scott. "Is ROI the Right Way to Judge a College Education?" The Chronicle of Higher Education. April 22, 2013. Accessed June 13, 2013. http://chronicle.com/article/Is-ROI-the-Right-Way-to-Judge/138665/.

Cronon, William. Î ŇOnly ConnectÅ ÑThe Goals of a Liberal Education.Ï The American Scholar, Volume 67, No. 4, Autumn, 1998. Accessed June 13, 2013

"Degree Qualifications Profile." Association of American Colleges & Universities. 2013. Accessed June 13, 2013. http://www.aacu.org/qc/dqp.

Delbanco, Andrew. *College: What It Was, Is, and Should Be.* Princeton, NJ: Princeton University Press, 2012.

"Employer Survey & Economic Trend Research." Association of American Colleges & Universities. 2014. Accessed June 14, 2016. https://www.aacu.org/leap/public-opinion-

Appendix I: Oregon Tech Mission Statement

Oregon Institute of Technology, a member of the Oregon University System, offers innovative and rigorous applied degree programs in the areas of engineering, engineering technologies, health technologies, management, and the arts and sciences. To foster student and graduate success, the university provides an intimate, hands-on learning environment, focusing on application of theory to practice. Oregon Tech offers statewide educational opportunities for the emerging needs of Oregon's citizens and provides information and technical expertise to state, national and international constituents.

Core Themes:

Applied Degree Programs

Student and Graduate Success

Statewide Educational Opportunities

Public Service

Appendix

Spring 2014

Assessment Executive committee submits recommendations for changes to ISLOs and/or general education requirements to GERTF

Structures and Processes subcommittee drafts governance structure to support general education

Summer 2014

AAC&U General Education and Assessment Institute⎯ GERTF team attends

Conceptual model first formed

Presentation to Executive Staff⎯ progress report

Mapping of co-curricular experiences with Students Affairs directors

Fall 2014

Initial phone meetings with consultant⎯ Ann Ferren

Convocation presentation

Appendix L: Essential Studies Synthesis Experience

The portions of the Essential Studies model described thus far do a great job of checking individual boxes -- helping ensure that students get a breadth of essential skills alo

Potential Examples:

What support is needed to sustain this -- to support faculty in new types of teaching, to cultivate opportunities from outside OIT that present themselves? Does it require new dedicated faculty lines for this (if so, how many), or explicit reassignment of current faculty?

Are we already doing this (or things like it) in various places in our curricula?

Initial Thoughts on ESSE criteria:

Appendix M: Implementation Timeline

Critical Path 2016-17