Math 98 Quantitative Literacy

The following document reflects the collaborative efforts of mathematics faculty members from all 17 two-year institutions in Oregon in developing a course outcome guide for Mth 98, Quantitative Literacy. Representatives from Oregon State University, Oregon Community Colleges Association, Oregon Department of Community Colleges and Workforce Development, the Higher Education Coordinating Commission, and the Oregon Department of Education have also contributed to this effort.

Mth 98, Quantitative Literacy, is a rigorous mathematics course that is designed to be part of an alternate pathway from the traditional algebra track. Rigor implies that students display conceptual understanding and procedural fluency while working on authentic applications. Throughout the course, the Rule of Four is implemented. That is, the information given in any mathematical problem is described in at least one of four ways: verbally, numerically, graphically, or algebraically. Students use this information to engage effectively with contextual, open ended mathematical problems. During their engagement, students must reason and interpret the information, make conjectures about the situation, communicate effectively, and verify their results.

A student for whom this Quantitative Literacy course may be appropriate falls under one or more of the following categories:

- ✓ One whose degree or certificate goal does not require Calculus.
- ✓ One whose path takes her or him to Mth 105, Math in Society.
- ✓ One whose path does not require Mth 112, Trigonometry.
- ✓ One whose goal is not within the STEM, Science, Technology, Engineering, or Mathematics, fields. This student could need some science content in their coursework but would not be considered a science major. Students in Liberal Arts fields fall in this category.
- ✓ One who is in a CTE program, particularly a non-STEM program.
- ✓ One who will not need mastery of algebraic manipulation in her or his career field.

All Mth 98 courses cover the following five major course topics:

1. Applied Number Sense
2. Applied Algebraic Reasoning and Modeling
3. Graphical Sense
4. Measurement
5. Statistical Reasoning

For each major topic, a list of supporting items has been drafted and is being finalized.

Mth 98 Convening Representatives

Community Colleges	Representatives
Blue Mountain	Pete Hernberg
Central Oregon	Jessica Giglio
Chemeketa	Wayne Barber
Clackamas	Bruce Simmons (distance)
Clatsop	Liz Hylton
Columbia Gorge	Lucas Lembrick
Klamath Falls	Bill Jennings
Lane	Jessica Knoch
Linn-Benton	Vikki Maurer
Mt. Hood	Maria Miles
Oregon Coast	Marge Burak (distance)
Portland	Virginia Somes
Rogue	Charlotte Hutt
Southwestern	Nikki Armstrong
Tillamook Bay	Geza Laszlo
Treasure Valley	Pat Rhodes
Umpqua	Dee Winn

Universities	
Oregon State	Scott Peterson

Special Guests	
ODE	Mark Freed
CCWD	Lisa Reynolds, Lisa Mentz
HECC	Frank Goulard
OCCA	Elizabeth Cox-Brand

Facilitator	
Central Oregon	Doug Nelson