March 5 2015

To: Dean Van Galen, Chancellor
   116 North Hall
   University of Wisconsin-River Falls

From: David P. Rainville, Chair
       Faculty Senate
       University of Wisconsin-River Falls

Re: UWRF Faculty Senate Motion 2014-15/63

At the March 4 2015 meeting of the University of Wisconsin-River Falls Faculty Senate, motion 2014-15/63 was passed and is effective immediately. The motion is forwarded to you for your action.

1. A motion from the General Education and University Requirements Committee (Donavon Taylor, Chair) to approve the following:

   Approved by the General Education and University Requirements Committee on February 18, 2015

   "The UWRF General Education Program will be revised, effective Fall Semester 2015-2016, such that the Sciences (S) and Scientific Investigation (SI) categories be replaced by a single Scientific Inquiry (SI) category based on the goals, criteria and outcomes described in the attached documents. Further, that courses currently approved in the S and SL categories automatically be approved into the new SI category until the next General Education Assessment Report for that course is due. At that time, a new General Education Appendix will need to be submitted, showing how the course meets the new SI criteria and outcomes. Currently enrolled students will be allowed to fulfill all science general education requirements by completing two courses in the new Scientific Inquiry (SI) designator category."

   The following is to replace the current Goal 3 in the UWRF Catalog:

   GOAL THREE

   Mathematics (M)

   Criterion:
Apply scientific principles to the natural world. Students will demonstrate knowledge of the principles and methods of quantitative and qualitative scientific reasoning.

Students will be able to:

1. apply mathematical skills in quantitative, qualitative, and analytical problem solving
2. demonstrate a knowledge of natural science,
3. analyze and interpret scientific data through inquiry-based activities.

To fulfill this goal, students are required to earn a minimum of 9 credits, with at least 3 credits under the M designation, and at least 6 credits under the SI designation.

Courses designated M:

- emphasize mathematical skills in quantitative, qualitative, and analytical problem solving.

Outcome:

Students will be able to:

a. demonstrate and apply mathematical skills to quantitative, qualitative, and analytical problem solving.

Scientific Inquiry (SI)

Scientific inquiry is a powerful approach to developing human understanding of the natural world. This requirement aims at strengthening students’ knowledge of the scientific method — the use of systematic observation, computational methods, simulation and/or experimentation to develop theories and/or test hypotheses. While rigorous scientific inquiry occurs in a wide variety of disciplines, courses which satisfy this requirement are limited to subjects which investigate natural or computational phenomena. Courses approved for this category must incorporate significant inquiry-based learning activities into course content and must include one or more investigative projects in which students are required to analyze and interpret scientific data.

Criteria:

Courses designated SI:

- develop students’ understanding of the natural or computational sciences.
- strengthen students’ knowledge of the scientific method — the use of systematic observation, computational methods, simulation and/or experimentation to develop theories and/or test hypotheses.
- emphasize and provide experience with analysis of scientific data through the collection of empirical data and/or use of simulated or existing data resources through inquiry-based learning activities.

Outcomes:

Students will be able to:
The following is to be used for assessment:  

APPENDIX GE

GOAL THREE – Apply scientific principles to the natural world

Scientific Investigation (SI)

Course Number and Name

All courses with a General Education designation will include, to the extent possible, critical thinking, written composition, oral discussion, and graphic components.

To obtain an SI designation, the proposed course must meet **all** the criteria and **all** of the outcomes listed below.

Criteria:

- Courses designated SI emphasize an understanding of the natural or computational sciences.
- Courses designated SI strengthen the students’ knowledge of the scientific method – use of systematic observation, computational methods, simulation and/or experimentation to develop theories and/or test hypotheses.
- Courses designated SI provide experience with analysis of scientific data through the collection of empirical data and/or use of simulated or existing data resources through inquiry-based learning activities.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>How will outcome be met?</th>
<th>What assessment procedure(s) will be used?</th>
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<tbody>
<tr>
<td>Students will be able to</td>
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<tr>
<td>demonstrate knowledge of</td>
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<tr>
<td>theoretical principles and scientific methodology for explaining and predicting phenomena in the natural or computational sciences.</td>
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<tr>
<td>Students will be able to develop and test hypotheses by collecting and/or accessing, and analyzing, interpreting and communicating scientific data as demonstrated through significant inquiry-based activities.</td>
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All General Education courses will be reviewed by the General Education and University Requirements Committee. What data will be provided to the committee to demonstrate the extent to which students in this course are meeting the outcomes?

Approved ✓

Disapproved

Dean Van Galen, Chancellor 3/20/15