Research Intensive Course Designation Proposal
Office of Undergraduate Research and Scholarship (OURS)
Center for Undergraduate Scholarly Engagement (CUSE)
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Last Updated: September 20th, 2024

Executive Summary: This document proposes the implementation of a Research-Intensive Course Designation to recognize courses that contain embedded undergraduate research experiences at Grand Valley State University.

A. Defining Undergraduate Research and what counts as a "Research Intensive" course

The Council on Undergraduate Research (CUR) defines **undergraduate research** as "a mentored investigation or creative inquiry conducted by undergraduates that seeks to make a scholarly or artistic contribution to knowledge." Undergraduate research can take many forms including being faculty led, independent, and can occur inside or outside of coursework.

Course-based research is described as the inclusion of research projects in the curriculum (Hensel, 2018b). Course-based research is sometimes referred to as "CURE," or Course-based Undergraduate Research Experience. Although CUREs by nature are diverse in structure and theme, they are defined as having the following five elements that are reflective of authentic research: 1) engaging students in disciplinary research or creative practices; 2) emphasizing collaboration in accordance with disciplinary standards; 3) examining broadly relevant topics; 4) exploring questions with unknown answers to expose students to the process of discovery; and 5) integrating iteration into the course, so students can see how disciplinary research or creative practices build upon themselves (Auchincloss et al., 2014).

Many faculty embed CUREs in their existing courses at GVSU as a way to deepen engagement in learning, yet these experiences go unnamed and unrecognized at the institutional level. We propose a research-intensive (RI) course designation attached to specific course sections and/or courses to elevate and recognize this work. A RI designation will show institutional support for the commitment of faculty actively engaged in providing CUREs. An RI course designation will also bolster GVSU's strong reputation as a leader in undergraduate research. It will also create opportunities for students to identify and select courses that embed undergraduate research experiences.

B. Criteria and Approval Process

1. Criteria

Classes and courses that seek a Research-Intensive Course Designation should integrate **undergraduate research** as a major part of the coursework and learning experience. To be considered Research-Intensive, a class or course must include the following:

- At least 30% of the work and class grade should involve research that the student completes under the supervision of their instructor, either individually, in pairs, or as a part of a group effort.
- The coursework should include at least one form of dissemination of the research
 which could include authoring a report or paper, designing and holding
 presentations, engaging in critique, exhibiting and/or performing. The dissemination
 piece should engage individuals and groups beyond the classroom, as appropriate in
 discipline (examples include but are not limited presenting at SSD, invite external
 audience members to provide feedback, author a report directed toward an external
 agency, among others).

Students' course-based research projects may include field work, data collection, literature reviews, report drafting, performances, creative works or other outcomes, or other forms of scholarly expression as defined by the discipline.

2. Approval Process

Research-Intensive Courses will be approved by the Undergraduate Research Council (URC) through two pathways: **course-based** and **section-based**. First is **course-based**. This means that a unit, department, or program may submit courses for Research-Intensive Course Designation approval. This means that all instructors of this course will follow the Research-Intensive Designation Requirements. The second pathway is **section-based**. Section-based approvals mean that the Research-Intensive Designation is approved for a course, but the designation is only applied to the requesting instructor's sections of that course. This means that if there are multiple sections of a particular course offered during a given semester, only the approved instructor's class will receive the Research-Intensive Designation.

Those seeking a Research-Intensive Designation for their course or section should submit their syllabus (including learning objectives) plus a written justification for how their course or section meets the designation criteria (listed above) through SAIL. Proposals will be

routed directed to Undergraduate Research Council (URC) for evaluation. Specifically, the justification should include:

- The type of research, inquiry, or creative endeavor explored in the class,
- The allocation of work/class grade attributed to research (should total at least 30% per the criteria),
- The plan for dissemination of the research through one of the following options listed in the criteria above.

Proposals of courses to receive the Research-Intensive Course Designation will be submitted through SAIL and will be routed directly to Undergraduate Research Council (URC). URC will evaluate each proposal as they are submitted on a case-by-case basis at their monthly meetings during the academic year. If feedback is requested, URC will communicate this to the unit, department, program, or instructor submitting the proposal. This review and feedback will be provided through SAIL. Once the proposal is approved in SAIL, URC will notify the Office of the Provost of the approval, and the Office of the Provost will notify the unit, department, program, or instructor as well as the Registrar's Office of this change in status. The Registrar's Office will then include the Research-Intensive Designation as an option that can be applied to particular sections of the course.

See <u>University of Central Florida Rubric</u> as an example.

C. Context for Research Intensive Designation

a. Evidence supporting CUREs and Learning Objectives

There is much literature that examines the measurable benefits of undergraduate research experiences in the classroom.

Course Based Undergraduate Research Experiences (CUREs) are viewed as a key high impact practice (Fischer et al., 2021), as well as part of active learning (Dolan, 2016; Kuh, 2008). According to Lee's taxonomy (Lee et al., 2020), CUREs allow students to achieve greater depth within the research process. Students engaging in CUREs gain comprehensive research experience that ranges from formulating an original question through collecting and analyzing their own evidence, culminating in reporting out their findings (Fischer et al., 2021). More specifically, CUREs teach students skills that facilitate their development as a scholar in their field. This includes teaching valuable specific discipline-related skills while also including

discipline-specific content (Bangera & Brownell, 2014; Thompson et al., 2015). Moreover, throughout the research process, students are guided by a mentor who provides them with routine contact and supervision (Lee et al., 2021).

Lee's taxonomy can be applied to course-based (CUREs) and other types of undergraduate research experiences (UREs). Nonetheless, even if a university offers many other UREs, participation in CUREs leads to different outcomes relative to other types of UREs. For instance, CUREs are often used to target introductory or mid-level students and can thereby be a gateway to other UREs including independent study or research assistantships, which are often mostly accessed by high achieving, upper-level students (Aklaher & Dolan, 2014; Auchincloss et al., 2014). CUREs can also act as a pathway of engagement for underrepresented groups of students who may have more limited knowledge about the research process. Participation in CUREs may prompt underrepresented groups of students to be more involved with other types of UREs in their future semesters.

As with many other high-impact practices (HIPs), CUREs have notable benefits outside of the classroom experiences. CUREs have been linked to improved student outcomes (e.g., sense of belonging as well as retention and graduation rates) and greater persistence in a university setting, especially when student encounter challenging subject matter (Fischer et al., 2021; Freeman et al., 2014).

b. Undergraduate Research at GVSU

Grand Valley State University (GVSU) already has a robust history of offering research experiences to undergraduates (UREs). Many UREs take place outside the classroom through independent studies, research assistantships, and summer programs and fellowships (e.g., Student Summer Scholars, Kindschi Fellowships, or McNair Scholars). Indeed, there are already many courses that include CUREs at Grand Valley State University (GVSU), but without a course designation, it is difficult to know the impact of course-based undergraduate research at GVSU. A Research-Intensive Designation would recognize and elevate ongoing course-based undergraduate research at GVSU.

c. Rationale for the Research-Intensive Designation at GVSU

Adopting a Research-Intensive Course Designation will be beneficial to the university, faculty, and our students. These benefits are:

Benefits to the Institution: GVSU increasingly recognizes the importance of high-impact practices, which includes undergraduate research (e.g., Reach Higher 2025 as well as the CLAS Voyage as two examples). Providing a Research-Intensive Course Designation would create institutional understanding of what course-based undergraduate research looks like through naming and providing language around what course-based research is.

Offering a Research-Intensive Course Designation would also allow the University and its colleges to capture how many undergraduate research experiences occur more easily and accurately on campus. Collecting data on CUREs is crucial when applying for external grants and relaying accurate information to stakeholders to support continued implementation of high impact practices on GVSU's campus. In addition, a Research-Intensive Course Designation would allow the institution to assess learning outcomes related to student research, understand how student research experiences relate to student success and retention, and more easily identify how to support faculty who provide students with course-based research experiences.

Moreover, many universities already offer a Research-Intensive Course Designation, and adopting such a designation would align GVSU with other institutions focused on providing students with high impact learning experiences.

2. **Benefits to Faculty:** Teaching CUREs often involves more time resources for faculty members, and this labor goes largely unrecognized in units, colleges, and at the university. Adding a Research-Intensive Course Designation names, recognizes and elevates this aspect of the workload of faculty members. Moreover, offering a Research-Intensive Course Designation will facilitate collaborative opportunities between faculty members who frequently do course-based research with students.

Adding a Research-Intensive Course Designation would also allow faculty to market their courses to students interested in undergraduate research experiences. Along the same lines, the Research-Intensive Course Designation would also redirect students from enrolling in the course if participating in a research experience does not align with their academic goals or is not appropriate for them for a variety of factors.

Note: Research Intensive Course Designations can apply to an entire course (course-based) or an instructor's sections (section-based) of a course – (see p. 2 on the Approval Process).

 Benefits to Students: Offering a Research-Intensive Course Designation aligns with GVSU's mission to offer an empowered educational experience for students (e.g., Reach Higher 2025 and the CLAS Voyage as two examples). Students who have enrolled in CUREs do not currently have a way to officially confirm the research experiences they have had in the classroom. Adding a Research-Intensive Designation would allow students to officially "claim" their undergraduate research experience when applying to research positions on campus, or after GVSU when students apply to graduate school or seek employment.

Adding a Research-Intensive Designation would allow students to easily find undergraduate courses that include research experiences. Although OURS works tirelessly to connect students with research opportunities, not all students have access, time, and/or desire to complete independent research or work on faculty-led research. Making CUREs more widely advertised will connect students with research experiences and give students the language needed to reflect and discuss their learning experiences.

d. Identified Concerns and Responses

1. What if my class was approved for a section-based Research Designation Approval and I do not want my class to have a Research Designation anymore?

If a section of your course is approved as a Research-Intensive Course, and you would like to stop or take a break from teaching it as a Research-Intensive, you can communicate with your unit and the Office of Undergraduate Research and Scholarship (OURS) about this change in status. Your unit can remove the Research-Intensive Course Designation from your course for one or more semesters.

2. Would capstone, independent study, honors projects, or independent readings count as a Research-Intensive Course? What about Research Methods classes?

No. These courses are already considered to include components of research or other high-impact practices.

Research Methods courses will be considered for a RI course designation, as such courses are not universally designed with a research component at GVSU.

3. How will the Research-Intensive Course Designation impact faculty workload?

The impact on Faculty Workload will be minimal. The Research-Intensive Designation will apply to existing courses at Grand Valley State University. Applying to have one's course labeled with the Research-Intensive Designation is the choice of the faculty member who teaches the section of the course or the unit offering the course.

If a faculty member seeks the Research-Intensive Designation, they will have to apply, which will take some time resources. The Office of Undergraduate Research and Scholarship (OURS) will offer support through consultations as well as syllabus or proposal review to faculty or units who wish to apply for a Research-Intensive Course Designation.

If a course is designated as a Research-Intensive Course, there will be some assessment work to be completed to make sure the course continues to comply with the Research-Intensive Designation parameters (the parameters are described on pp. 1-3 under Criteria). The Office of Undergraduate Research and Scholarship will have a Faculty Fellow appointed to this assessment work to assuage the impact on the instructor's workload. Assessment is described in greater detail on pp. 7-8 of this proposal.

In fact, offering a Research-Intensive Course Designation could reduce certain aspects of faculty workload.

The approval of a Research-Intensive Course Designation will create a central repository of all courses that include undergraduate research. This will allow the Office of Undergraduate Research and Scholarship (OURS) to better understand how many CUREs exist on campus. This will help OURS better direct resources toward faculty and units offering these experiences to students. More specifically, OURS will work with faculty to support the development and maintenance of Research-Intensive Courses in several ways. OURS will provide resources to faculty members interested in developing Research-Intensive Courses through one-on-one appointments, as well as Learning Communities (LC), (for example, one LC focused on research intensive courses is occurring during AY 2023-2024 through Pew FTLC). This will facilitate relationships between faculty members to build connections with faculty doing similar work, allowing for the exchange of ideas and potential collaborations that could shift or reduce workload. OURS will also provide Council on Undergraduate Research (CUR) memberships for faculty who currently teach/are interested in teaching Research Intensive Courses. CUR offers an annual meeting, workshops, discussion boards, and other resources for faculty who work in the field of undergraduate research.

4. How will the Research-Intensive Course Designation be assessed?

Faculty will not be required to complete any additional assessments for Research-Intensive (RI) Courses beyond those that they assign as part of normal practice within the course. Moreover, faculty will not be required to use a particular rubric or submit scores on students' work related to their research project.

As noted earlier, faculty will submit a course syllabus when they apply for a course to receive the Research-Intensive designation. Each year, the Office of Undergraduate Research and Scholarship (OURS) will seek confirmation that the requirements for the research project as described in the syllabus are unchanged or, when necessary, expect an explanation of changes with an updated copy of the syllabus.

Program assessment of the Research-Intensive Courses will be completed through The Office of Undergraduate Research and Scholarship (OURS). This assessment will involve compiling data from each syllabus to document the types of research products students are producing and the number of CURES at GVSU. The registrar will provide data on the number of students enrolled in Research-Intensive designated courses to OURS.

In addition, program assessment will include collecting data to capture the impact of the Research-Intensive Courses on students' learning and agency in each CURE. This will include the use of research-based survey instruments or interview and focus group protocols (e.g., Mantai et al., 2024; Shortlidge & Brown, 2016). The Office of Undergraduate Research and Scholarship (OURS) will seek volunteers from enrolled students and faculty instructing Research-Intensive Courses for these data collection efforts. Participation in program assessment is not a requirement for students or faculty.

D. Appendices

E. References

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