

Interdisciplinarity@WMU- Phase One planning Template

- 1. Brief Overview:** Provide a brief overview of the proposed interdisciplinary initiative. What types of questions would the initiative ask? What types of complex problems would it seek to solve?

The B.S. in Global and International Studies (GIST) is patterned after the fully interdisciplinary B.A. in Global and International Studies. The BA produces graduates with language skill who broker cross-cultural understandings. Our graduates assume roles in human service agencies, in schools engaging international populations, in diplomacy and law, with foreign service missions to China, Kazakhstan, and Ethiopia. Other graduates serve on congressional committees producing legislation dealing with international affairs, or interpreting foreign language communications at the National Security Agency. However, in this increasingly data-intensive and data-connected world there is a need for individuals who can combine a thorough understanding of geographically-based knowledge with quantitative data, technology and statistical tools to find solutions for world problems.

Strategies for vaccinating 7 billion persons around the globe requires, in addition to cultural competencies, skills in the management of data and information, the use of geographic information systems to map outbreaks and transportation infrastructure, statistical modeling, and cyber security to safeguard the collection of vast troves of sensitive information. We need to supplement the BA in GIST with a BS in GIST to produce graduates who are not only culturally knowledgeable, but also endowed with quantitative skills in Computer Science, Statistics, GIS, data collection and quantitative interpretation methods.

This graduate will provide the glue to interdisciplinary teams striving to solve problems that are increasingly complex in our increasingly globalized world, whether that be the spread of COVID-19, of terrorist cells, of climate refugees, global food supply disruptions or rising world income inequality which appears to be increasing the heat on governments.

- 2. Impacted units:** What existing units, programs, and colleges would be involved in the proposed initiative? What other possibilities for collaboration across campus or in the broader community might exist now or in the future?

This major would reside side by side with the BA in Global and International studies, enhancing a unit that is already fully interdisciplinary. The GIST program has no faculty assigned to it, save its director, who remains a faculty member in her disciplinary unit. Students take a range of courses from across the curriculum including courses in history, political science, economics, geography, philosophy, environmental studies, religion, sociology, languages, study abroad and more. In the BA, students are required to master a foreign language as evidenced by completing at least 2 foreign language courses at the 3000-level. The BS in Global and International Studies will require, instead, that students master quantitative/technology skills.

The quantitative course requirements will include 2 classes in computer science, a statistics class and then at least one technology or applied class that uses these skills in a meaningful way. Selected classes from geography, computer science, economics, political science and statistics could provide suitable selections for the technology/applied class.

- 3. Impact on teaching, learning, and curricula:** Describe the anticipated impact of the proposed initiative on teaching, learning, and curricula. How might this initiative help to grow enrollment, including by reaching new audiences of learners through continuing education, dual enrollment, or professional certification? How will the proposed initiative positively impact the training of undergraduate and graduate students? How does it enhance our institutional commitment to diversity, equity, and inclusion?

The BA in GIST is popular, but in some respects outdated. The World Affairs Council of West Michigan has the motto, "Know the world and then change the world." This resonates with many and is behind the original creation of GIST-type programs. But, in today's environment, knowing the world is NOT enough to change the world. It is necessary, but not sufficient. We need to manage the billions and trillions of pieces of information that are generated every day, organize and analyze them in order to confront and mitigate the problems of the day. While the GIST program has placed students at the National Security Agency to translate foreign language "chatter," someone has to find patterns, assess the statistical significance of those patterns, and interpret those relationships in the data. While acknowledging vaccine hesitancy and understanding that it originates from religious conventions or political ideologies it is still important to work out the logistics of getting vaccines to as wide a circle as possible while safeguarding the collection of sensitive information. We need to add to our production of graduates who can boast of qualitative and technology skills that are paired with geographically-based domain knowledge.

The international committee of the college of Arts and Sciences has worked for years to incorporate STEM disciplines into the university's internationalization efforts. This initiative can help. In addition to bridging the STEM - humanities divide, we can contribute toward greater interactions among students/faculty who are working with content that is inherently directed toward diversity and inclusion.

A few programs around Michigan and the US offer BS programs in Global Studies, but most do not. We are in place to be a leader given that GIST at WMU is a long-standing program with solid connections to strong units like the Haenicke Institute. Building a more tech-savvy track can attract a new line of students and facilitate job searches.

- 4. Impact on research and creative activity:** Describe the anticipated impact of the proposed initiative on research and creative activity. How will this initiative promote discovery and creative scholarship? How might it result in increased external funding?

This program will forge ties between globally-informed students/faculty with students/faculty specializing in data, statistical methods and technology. The GIST program currently hosts two seminar series; the Faculty Abroad series is intended for faculty to share, with students and other faculty, teaching and research experiences while abroad. Research Brief in Global Studies, in contrast, pair faculty/researchers in different disciplines to describe their research projects with the intent of, not only the dissemination of findings, but also to discover links that may exist in their respective research. (E.g. a geographer sharing impediments to surveying farmers in China while in the same session a sociologist speaks to the challenges she

experiences surveying second generation Chinese in the U.S.). These can be expanded to to engage more faculty in the data/statistical/technology areas to contribute to this vibrant community.

The GIST program has produced a tool available for all to access and discover world data, the Global Data Center (<https://wmich.edu/globalstudies/global-data-center>). By providing more of our students with skills in applying data/technology skills to information, we have an opportunity to produce additional research that begins to address pressing problems. While the data/technology/statistics programs at the university have many students engaged in such work, GIST students can provide the global knowledge base that is necessary to motivate and interpret cross-culture and internationally-based research projects and findings.

- 5. Efficiencies and/or cost savings:** How might the proposed initiative contribute to increased efficiencies and/or cost savings, for example by reducing administrative positions (e.g. chairs/directors), sharing staff support services and/or by sharing facilities?

The BA in GIST requires that students take two GIST-prefixed courses---an introductory course (which is also taken by many students fulfilling essential studies/general studies credit) and a capstone senior seminar course. All of the other courses in the major are in other departments around the university. The BS in GIST will be modeled in the same manner. This model takes advantage of cost efficiencies in ways that most other majors cannot. Students in effect build their program of study by selecting seats that are “left over” from classes that do not fill -- using the university’s excess capacity. For example, during spring 2021 there are 3 different courses in the comparative religion department that are suitable for GIST students with the focus field: Identities and Cultures in a Globalized World. These are REL 2100, 2010, 2050 (Religions of the World, Buddhism, or Christianity). If none are available because they are fully subscribed, students can select any of 56 other pre-approve course with the following prefixes (AAAS., ANTH, ART, CHIN, CLASS, etc.) With a fully operating BA in GIST, expanding to a BS is trivial. No additional courses need to be taught, there is ample choice (with the exception of the 2 basic Computer Science (CS) classes). The CS department has indicated that there is enough excess capacity in those 2 CS-required classes to accommodate GIST students. Hence, the BS does move us toward greater efficiencies at the university by taking up seats in classrooms that would otherwise go unused.

- 6. Impact on course offerings and workload:** At present, proposed initiatives will only be feasible and sustainable if they can be supported by existing resources, including instructional capacity, faculty and staff time, and facilities. Will the proposed initiative streamline existing course or program offerings? Could the initiative help create more equitable and sustainable workload for faculty, for example, by reducing the need to offer under enrolled courses, reducing the frequency of course offerings or eliminating the need to teach some courses?

The work load for the director of GIST will increase with this program, by attracting more students needing differential advising. It is not likely that a new section of the introductory GIST class (GIST 2000) would be needed given that we currently offer about 170 seats during fall and 160 seats during Spring semesters. (This class also serves as an ES/GS class). It would be trivial to increase class sizes by a few students in each of the 4-5 sections we teach each semester to accommodate students in the BS. I have spoken to the chairs of Computer Science, Statistics, and Geography who can vouch for the availability of seats for the student electing a BS in

Global and International Studies. I can reach out to Political Science and Economics for the possibility of additional technology/application courses to be incorporated into this program.

7. Additional Information: What additional information would you like to provide in support of this proposal?

Knowing the world is necessary, but not sufficient, to change the world. We need tech savvy graduates with expertise in global content to serve as the glue in interdisciplinary teams to make for a sustainable world. WMU, with its already strong interdisciplinary program in global and international studies, is well positioned to take this small step -- with potentially big rewards for both WMU and the world.

8. Contact

Susan Pozo, Global and International Studies