SUPR 301
Introduction to Sustainable Practices
In this course, students will explore multiple interpretations of the concept of sustainability as they pertain to the key elements of environment, economics, and social equity, i.e., the Three “E”s. Systems thinking will be introduced as a mechanism for understanding sustainability, and students will use systems as a way of understanding the interplay of various elements in developing and employing sustainable practices. Core themes of the degree will also be introduced, including themes of resilience and adaptive challenge. Students will also be introduced to the program’s core competencies and outcomes as a way to visualize their degree pathway as it leads to the capstone project.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

SUPR 325
Social Perspectives on Sustainable Practices
In this course, students will use an interdisciplinary approach to develop an understanding of the values, beliefs, and social institutions that influence sustainable (or unsustainable) practices. Cross-cultural ideas of sustainable practices, as well as community, development, and decision-making processes are explored in relation to human interaction with local cultural and natural environments. Students will learn how cultural, social, and psychological forces can shape human practices to be ecologically sound, socially just, and economically viable.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

BIOL 320
Concepts in Biology: Systems and Diversity
Students will examine how living organisms interact with each other and their environment. Students will see humans as an inseparable part of ecological systems, learn how humans have affected natural systems, and explore ideas to ameliorate and/or prevent environmental degradation considering the key elements of environment, economics, and social equity, i.e., the Three “E”s. This course may include off-site visits.
(LAB)
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

HIST 345
Global Historical Themes in Sustainability
Students explore the history of sustainability as related to politics, economics, labor, business, the environment, public policy, science, and the arts. Examined through this lens of historical enquiry, students will develop theoretical and practical knowledge that better prepares them to consider a future related to sustainability issues and sustainability problem-solving frameworks. The course covers the changes and innovations, the promises, predictions and criticisms, as well as the consequences, both intended and unintended, of such topics as industrialization, scientific management, technological development, and resource use. Course materials will include an eclectic mix of sources, such as novels, science fiction, popular culture, and interpretative essays.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.
ENVS 370
Environmental Chemistry, Pollution, and Waste Management
This course is an examination of the applications of chemistry in industrial, municipal, and natural systems. Students will define pollution and examine various pollution sources that impact air, water, and soil. Toxicology will be introduced, as well as the fate and transport of pollutants in various environments and impacts to human and environmental health. Waste stream management will be discussed in terms of potential pollution, including disposal by engineered sanitary landfills as well as other methods used globally. Strategies for eliminating and mitigating pollutants will also be discussed, as will strategies for minimizing waste streams. This course may include one or more off-site visits. (LAB)
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

POLS 306
State Government and Public Policy
This course focuses on the institutions, actors, processes and challenges involved in making and implementing public policy in state government. Students will examine the political and legal foundations of state governments and the actors that influence policy outcomes to understand 1) how state governments function, 2) what allows government to meet the needs of their constituents and 3) what prevents government from achieving their goals. Additionally, this course will introduce students to foundational theories and concepts of the study of public policy creation, implementation and evaluation. Although this course will focus on state government structure and policymaking generally, it will give special attention to the impact of policy processes on environmental and sustainability policy and the government of the state of Washington.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

CMST 340
Public, Civic, and Community Advocacy
Students learn how to develop and support arguments, evaluate and critically review evidence and practice oral debating skills. Emphasis is placed on introducing students to the practical application of analytical skills and competencies in framing and shaping public discourse. Coursework includes in-class activities and exercises that promote the use of both argumentation and negotiating skills in managing communication problems and challenges. Community based learning projects offer students the opportunity to collaborate with local community stakeholders and members in sharing and promoting active and ethical practices for engaging in public and civic discourse.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

GEOL 360
Earth Systems and Global Climate Change
This course is a detailed examination of the elements and processes of Earth Systems Science (ESS). Students will apply ESS principles in analyzing the current climate system, its components, cycles, and feedbacks. Historical climate systems will also be studied, including methods of understanding those systems, and they will be compared and contrasted to current data. Anthropogenic influences on the current system will be examined in detail. Students will evaluate systems modeling software (such as Stella) as well as interpreting general circulation models. Mitigation and adaptation strategies will also be assessed. (LAB)
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.
SUPR 310
Statistics for Research in Sustainable Practices
The focus of this course is statistical analysis as applied to quantitative research in the field of sustainable practices. Students will be introduced to both descriptive and inferential statistical techniques and how they are used in this context. Both experimental and correlational analysis (including regression) will be presented and contextualized with real world problems and examples. The emphasis is on interpretation and communication of data as well as problem solving using statistical techniques. Research ethics and human subject considerations will be discussed. Needed technology will be taught along with the subject matter.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

SUPR 410
Research Design and Methods in Sustainable Practices
The focus of this course is research design and methodology as applied to problems in the field of sustainable practices. Students will learn basic principles of research design and data collection methods in the field of sustainable practices, including environmental sampling. Students will learn to choose appropriate statistical tools and apply them in the analysis of both qualitative and quantitative data. Elements of set theory and relational algebra will also be addressed as they are used in working with data sets. Students will learn to interpret published research as well as communicate results of their own research in formats that can reveal complex information at a glance, generate insights and spur action. Research ethics and human subject considerations will be discussed. Needed technology will be taught along with the subject matter.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

ECON 460
The Economics of Natural Resources
This course is a survey of the economics of renewable and nonrenewable natural resources including fisheries, forest, minerals and fuels, environmental resources such as clean air and water, and ecological resources such as biodiversity and a stable global climate. Students will analyze these topics by considering optimal trade-offs between benefits and costs of resource use, including trade-offs between current and future use and sustainability. The role of property rights on resource use, market failure and the role of government are covered.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

GEOG 440
Global Natural Resource Management
This course identifies critical natural resources throughout the world and their distribution. These include, but are not limited to, water, fossil fuels, forests, soil, minerals, fisheries, and wildlands. Elements of extraction/harvest, distribution, and consumption of those resources will be examined in depth, along with environmental impacts. Management and conservation of those resources, along with alternative options, recycling, re-use, and waste will also be discussed.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.
BIT 435
Data Science and Visualization
This course introduces the basic techniques of data science, including data storage and management, machine learning and data mining, basic statistical modeling, and data visualization to create graphical representations that can be analyzed and presented to reveal complex information, generate insights and spur action. The course will focus on a project-based, team process for using a variety of data models to predict trends, make assessments, and transform data into attractive and informative visual forms that move understanding into action. The course will also review current computing advancements spurring the development of data science, such as SQL and NoSQL databases, parallel and mobile computing, and online APIs.
Prerequisite(s): Completion of SUPR 410 with a grade of 2.0 or higher; and completion of BIT 158 with a grade of 2.0 or higher; OR instructor permission.

PHIL 460
Ethics of Sustainability
Students will come to understand the important ethical challenges facing individuals, organizations and countries in the world, as well as the science that both underlies those challenges and in some cases, either contributes to or alleviates them. Students will leave this class with a unique skillset: they will have developed the moral reasoning ability to formulate and defend positions on key environmental issues as well as the scientific reasoning ability to be able to put into practice solutions they may come up with.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

POLS 445
Environmental Politics and Policy
This course offers an in-depth examination of historical and current issues in environmental politics. Students will develop a thorough understanding of the stages of the policy process from the identification and advocacy of environmental public policy problems, to agenda setting, to creation of alternatives, to decision-making, to implementation, to evaluation and feedback. The examination of environmental case studies from the local and state levels to the national and international levels will create a deeper understanding of the complex political dynamics involved in policy making institutions. Ultimately, students will gain the skills and tools to competently analyze domestic and global environmental policy in a variety of situations.
Prerequisite(s): Admission to BAS-SP program, OR instructor permission.

BUS 480
Sustainable Management
This course will help students explore assessing business, management, and leadership in the context of contemporary sustainable technological advances and globalization. Organizations will be examined within their economic, political, and social environment. Organizational development and management strategies will be analyzed in terms of current and future utility. Traditional elements of management such as decision making, strategic planning, organizational behavior, human resources, and conflict management are incorporated in the course.
Prerequisite(s): Admission to BAS-SP program: AND completion of ENGL& 235 with a grade of 2.0 or higher. BUS&101 is recommended, but not required.