Explanation of Course Numbers

- Courses in the 1000s are primarily introductory undergraduate courses
- Those in the 2000s to 4000s are upper-division undergraduate courses that can also be taken for graduate credit with permission and additional work
- Those in the 6000s and 8000s are for master’s, doctoral, and professional-level students
- The 6000s are open to advanced undergraduate students with approval of the instructor and the dean or advising office

PSUS 6201. Principles of Sustainable Urban and Regional Planning. 3 Credits.
The environmental, social, and economic elements of sustainability. Present and future challenges, including environmental management, energy policy, financial crises, global warming, inequality, public education, third and first world slums, the success and failure of nations, urban agriculture, urban economics, and more. The implications of sustainable development and conducting research based on evidenced-based policy. Students focus on the work of researchers outside of the planning field as they write a series of research essays containing reviews of relevant scientific literature.

PSUS 6202. Urban and Environmental Economics. 3 Credits.
The application of neoclassical economics to problems faced by practitioners of the field of sustainable urban and regional planning. Key economic concepts including supply and demand, consumption and production, markets and market failure, and measurement of environmental and other non-market commodities. An economist's perspective on the principals and methods for understanding urban and environmental challenges and solutions, urban growth, environmental quality, public policy, and other issues fundamental to contemporary development.

PSUS 6203. Research Methods I: Geospatial and Econometric Analysis. 3 Credits.
Focus on developing proficiency in geographic information systems (GIS) and econometric analysis, a method of statistical analysis for measuring the relationships at work in socioeconomic phenomena. Building and analyzing spatial datasets, specifically using ArcGIS and Stata statistical software.
PSUS 6222. Climate Change Economics. 3 Credits.
Energy use in built environments with an emphasis on fundamental drivers of energy demand, strategies to promote energy efficiency, and essential features of energy supply; the relationship between energy demand and supply in development; how advances in construction technology can help counter greenhouse gas emissions.

PSUS 6223. Sustainable Communities II: Tools for Assessment and Transformation. 3 Credits.
Builds on PSUS 6212 by further detailing the theory and tools relevant to the assessment and transformation of neighborhood and communities. Geospatial analysis explore the fundamental drivers of urban form, advanced transportation systems, theories of change, and various impact assessment tools used to inform policy implementation.

PSUS 6224. Sustainable Energy for Cities and the Environment. 3 Credits.
Resource management and renewable energy technologies. Vulnerabilities of existing urban structures, particularly the energy grid. Implications of and solutions to energy-related problems likely to arise in present and future cities.

PSUS 6230. Sustainable Comm Design Studio. 3 Credits.
PSUS 6231. Practicum:ClimateChangeMgt&P. 3 Credits.
PSUS 6233. Capstone Studio. 3 Credits.
PSUS 6235. Adv Topics in Urban Sust. 3 Credits.
PSUS 6260. Intro to Sustainable Design. 2 Credits.
PSUS 6261. Ecology of the Built Env.. 2 Credits.
PSUS 6262. Tools for Sustainable Design. 3 Credits.
PSUS 6264. Native Plants I. 2 Credits.
PSUS 6265. Native Plants II. 1 Credit.
PSUS 6266. Ecological Restoration. 1 Credit.
PSUS 6268. Sustainable Design Methods. 2 Credits.
PSUS 6269. Sustenance and the Landscape. 2 Credits.
PSUS 6270. Sustainable Design Charrette. 3 Credits.
Preparation of a final project that demonstrates students' understanding of how to select and use sustainable site principles in a landscape design. Building and expanding upon techniques learned in previous coursework, students show comprehension of how their project site has boundaries within its surrounding ecosystem, but is still part of a larger life cycle. Students work in a concentrated charrette format to develop a site design that is fully sustainable and buildable.