

# ENVIRONMENTAL SCIENCE (ENS)

Division: Biology, Chemistry and Physics Division

## ENS 201 Principles of Sustainability (3 Credits)

This course is designed to provide an introduction to and fundamental knowledge of sustainability concepts for entry-level students, as well as for under- and/or unemployed adults who are in job transition from non-environmental sectors seeking grounding in the field of sustainability. Topics covered include basic sustainability principles and practices relative to population issues, climate change, renewable energy, consumption, ecosystem threats, transportation, green design and construction, biodiversity, food, and environmental justice.

**Pre-requisites:** (( (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (( (Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C ) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

## ENS 225 Intro. to Green Fac.Management (4 Credits)

This course is a survey of the best current practices in Green Facilities Management. The student will learn how to operate an environmentally healthy facility. The student will explore why green business is good business as well as the practical strategies to green in specific areas. The course highlights many of the useful green ideas that facilities can readily implement. Practical, economical tactics in the areas of water, cleaning, lighting, transportation, sustainable design, landscaping, recycling, energy conservation, solar power, and financing will be presented. The course addresses carbon reduction, monitoring, and reporting. Lab exercises and field trips will supplement the theory presented.

**Pre-requisites:** (( (Companion Arithmetic with a score of 069 and Companion Elementary Algebra with a score of 076) or (Arithmetic (Next-Gen) with a score of 260 and Quant,Algebra,Stats(Next-Gen) with a score of 260) or (Bilingual Computation with a score of 20 and Bilingual Algebra with a score of 19) or MTH 092 with a minimum grade of C or Move Up Math 092 with a score of P or MTH 092 Summer Bridge with a score of P or TRANSFERRED COLLEGE LEVEL MATH with a score of 898 or Elig. for Math 100,101,103 with a score of 905 or Pre-reg. COLG math waiver only with a score of 908 or SAT/ACT Elig for Mth 100 with a score of 994) and (( (Companion Essay with a score of 06 or Companion Essay with a score of 07 or Write Placer Essay with a score of 04 or Write Placer Essay with a score of 05 or Write Placer Essay with a score of 06) and (Companion Reading Comprehensio with a score of 079 or Reading (Next-Gen) with a score of 237 or RDG 096 with a minimum grade of C) and (ENG 096 with a minimum grade of C or ENG 098 with a minimum grade of C or Move Up English 096 with a score of P or ENG 096 Summer Bridge with a score of P) or ESL 063 with a minimum grade of C ) or Companion Essay with a score of 08 or Write Placer Essay with a score of 07 or Write Placer Essay with a score of 08 or TRANSFERRED ENG 101 with a score of 889 or Elig. for Eng 101 with a score of 904 or Pre-reg. Eng 101 waiver only with a score of 906 or SAT/ACT Elig for Eng 101 with a score of 993 or TRANSFERRED ENG 102 with a score of 998)) or COLLEGE DEGREE with a score of 988 or SAT/ACT Elig Eng101 Mth100 with a score of 995 or Transf. Eng 101 Mth 100 with a score of 999

**ENS 226 Residential Energy Management (3 Credits)**

This is an entry level course. It emphasizes a systems approach to residential energy management, focusing on the whole house approach. Students will learn the differences between energy efficiency and energy conservation. Building Performance Institute standards will be introduced. Energy auditing equipment, combustion safety testing, utility bill analysis, and fuel conversions are topics covered in this course. Emphasis will be placed on the job opportunities in the residential energy efficiency/energy management industry.

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**ENS 227 Intro.Green Comm. Indus. Bld. (3 Credits)**

The course focuses on these principles: an efficient building is economically and environmentally prudent; there is fiscal value inherent in energy management, and resource consumption that also keeps the environment intact. The course provides an in- depth exploration of environmental, social, and political values from different perspectives. Scientific and technical considerations are balanced by behavioral and social aspects when issues of efficiency, conservation, and resource management are addressed. This course lays a strong foundation for students who are interested in entering the emerging field of energy management. Several career paths are discussed in the course.

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