About this Catalog Addendum

The updates listed in this document apply to the 2017-2018 Saint Martin’s University Academic Catalog. In the entries below, page references are listed with a short description of where the new information should be inserted. Students are encouraged to contact their academic advisor or program chair in the event they have any questions regarding changes in program requirements.

Page 19  Advanced Placement Table (AP) - Addition

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Page 111  Environmental Studies – Addition

ENVIRONMENTAL STUDIES

Faculty

Jeff Birkenstein
Robert Bode
Katie Bugyis
Aaron Coby
Jeff Crane
Brandy Fox
Irina Gendelman
Heather Grob
Mary Jo Hartman
Nathalie Kuroiwa-Lewis
Joseph Mailhot
Gregory Milligan
Jamie Olson
David Price
Sonalini Sapra
Alexis Walker
Teresa Winstead

The Environmental Studies program at Saint Martin's University is a truly interdisciplinary program. Students have an opportunity to focus on a B.S. (science track) or a B.A. (social policy track). In each of these tracks, students gain experience in a broad spectrum of environmental topics and service learning opportunities. The Environmental Studies program incorporates the Benedictine tradition of creating sustainable communities of peace for 1500 years, and benefits from our close proximity to the Washington State Department of Ecology and the state government in Olympia. We are also able to take advantage of the natural resources located immediately on our campus and close by in Western Washington.
The B.S. track is a degree centered in Biology and the fundamental scientific processes governing the environment. The degree is rooted by a broad selection of courses in ethics, service learning, social science, economics, policy, and mathematics. Additional tracks may be designed in both chemistry and mathematical modeling.

The B.A. track is a degree centered in policy and social justice issues surrounding the environment. Students receive a critical foundation in science concepts and an expansive selection of electives allows a student to focus on areas of ethics, service, economics, policy, or food sustainability.

Student Learning Outcomes

- Demonstrate proficient understanding of the scientific concepts related to environmental science at a level relevant to the degree option.
- Demonstrate proficient understanding of the ethical, social and policy concepts related to environmental studies at a level relevant to the degree option.
- Effectively synthesize and relate the Ethical, Scientific and Social issues surrounding the environment.
- Successfully design and implement an environmental studies research project that incorporates the fields relevant to the degree option.
- Demonstrate persuasive written and oral communication skills

BACHELOR OF ARTS

General Education Core (40-46 semester hours)

Major in Environmental Studies (BA)

Lower Division Courses (16 semester hours)

- ECN 202 Macroeconomics
- ENV 115, ENV 110 or ENV 105 (Select one)
- MTH 201 Statistics
- PLS 151 The Politics of US Public Policy
- SOC 102, SOC103, or SJ 110 (Select one)

Upper-Division Courses (21 semester hours)
- ENV 330 Climate Change
- ENV 340 Global Environmental Politics
- ENV 390 or ENV397 Internship or Directed Study
- ENV 498/PLS 498 Research Methods
- ENV 499/PLS 499 Senior Research Paper
  RLS 325, RLS 350 or RLS 370 (Select one)

**Elective courses chosen from following list** (18 semester hours)

- ECN 201 Microeconomics
- ECN 371 Econometrics
- ECN 375 Cost Benefit Analysis
- ECN 325 Evolution of Economic Thought
- ENV 115, ENV 110 or ENV 105 (separate from LD requirement)
- ENV 310 Environmental Social Issues (repeatable)
- ENV 320 Environmental Humanities (repeatable)
- ENV 350 Environmental Law
- ENV 395 Special Topics (repeatable)
- GPH 210 World Regional Geography
- PHL 314 or 356 Philosophy of Nat/Sci or Bioethics
- PLS 300 International Relations
- PLS 320 State and Local Politics
- SJ 310 or 301 Social Justice in Film or Social Justice in Literature

**BACHELOR OF SCIENCE**

**General Education Core** (40 semester hours)

**Major in Environmental Studies (BS)**

**Lower Division Courses** (34 semester hours)

- BIO 141 & 142 General Biology I and II w/ labs
- CHM 141 & 142 General Chemistry I and II w/ labs
- ECN 202 Macroeconomics
- ENV 115, ENV 110 or ENV 105 (Select one)
- MTH 122 or MTH 171
- MTH 201 Statistics or MTH357 or BIO 301
- SOC 102, or SOC 103, or SJ 110 (Select one)

**Upper-Division Courses** (22 semester hours)

- BIO 358 or BIO 359 Ecology or Field Ecology w/ lab
- ENV 330 Climate Change
- ENV 340 Global Environmental Politics
- ENV 390 or ENV397 Internship or Directed Study (service)
- ENV 400 Senior Seminar
- ENV 401 Senior Research
- RLS 325, RLS 350 or RLS 370 (Select one)

**Elective courses chosen from following list** (12 semester hours)

- BIO 301 Biostatistics
- BIO 305 Botany w/ lab
- BIO 310 Marine Biology w/ lab
- BIO 350 Microbial Ecology
- BIO 358 or BIO 359 Ecology or Field Ecology w/ lab
- BIO 375 Genetics w/ lab
- CHM 201 Organic Chemistry w/ lab
- CHM 331 Quantitative Analysis w/ lab
- ENV 310 Environmental Social Issues
- ENV 320 Environmental Humanities
- ENV 350 Environmental Law
- ENV 395 Special Topics (repeatable)
- GPH 210 World Regional Geography
- MTH 322 Differential Equations
- MTH 353 Linear Algebra
- MTH 381 Math Modeling
- PHL 314 or 356 Philosophy of Nat/Sci or Bioethics

**Environmental Studies Courses**

**ENV 105 Earth Science with laboratory (4)**

This course introduces students to the Earth as a system of interconnected spheres (atmosphere, hydrosphere, lithosphere, and biosphere). Local geology is explored via field trips to unique geological sites (Mt Saint Helens, Mima mounds, glacial moraines). Laboratory topics cover local geology, the scientific method, plate tectonics, atmospheric science, and biosphere ecology.

**ENV 110 Environmental Science with laboratory (4)**

Course encompasses broad topics in environmental science; including species diversity, population dynamics, human population growth concerns, energy use and water quality. Includes laboratory and field experiences.

**ENV 115 Chemistry of the Environment with laboratory (4)**
This course is designed to introduce students to the aspects of chemistry that are most relevant to environmental issues, and view these issues through the lens of a chemist. The fundamental chemistry behind environmental topics including greenhouse gases, the ozone layer, and nuclear waste are examined. An analysis of conventional and alternative energy sources, and the chemistry behind them, serves as a framework for this learning.

**ENV 310 Environmental Social Issues (3)**
A course addressing various topics surrounding environmental issues from a social science perspective. Topics vary and course may be repeated for Environmental Studies BA, but not for BS.

**ENV 320 Environmental Humanities (3)**
A course developed from a humanities prospective, which addresses topics related to environmental studies. Topics vary and course may be repeated for Environmental Studies BA, but not for BS.

**ENV 330 Climate Change (3)**
This course examines the historical, economic, social and scientific contexts surrounding the topic of climate change.

**ENV 340 Global Environmental Politics (3)**
This course introduces students to major global environmental concepts and issues such as biodiversity, climate change, epistemic communities, regimes, global and regional environmental governance, and sustainable development.

**ENV 350 Environmental Law (3)**
An introduction to United States environmental laws and to the nature, extent, and prosecution of environmental crimes.

**ENV 390 Internship (1-6)**
Off-campus experience in Environmental Studies either in a work-related or research environment. Monitored, supervised and evaluated by an intern supervisor and faculty member. Student may register for 1-6 internship credits.

**ENV 395 Special Topics (1-4)**
Instructors and topics will vary. May be repeated for credit.

**ENV 397 Directed Study (1-3)**
Directed Study allows students to pursue an area of interest as developed with their directed study instructor. If taken to satisfy the ENV Internship requirement, course must include a service component. May be repeated for credit. Prerequisite: permission of instructor.

**ENV 400 Senior Seminar (2)**
Presentation and discussion of results of literature and laboratory investigations of environmental topics.
Preparation of senior research project proposal. Intended for Environmental Studies Bachelor of Science degree.

**ENV 401 Senior Research (4)**  
Literature review, development and implementation of a research project focused in an area of study determined by the instructor. Culminates in a written paper and oral presentation. Intended for Environmental Studies Bachelor of Science degree. Prerequisites: BIO358 or BIO359, and ENV400.

**ENV 498 Research Methods (3)**  
This course is designed to give students a theoretical and practical knowledge of research methods in the disciplines of environmental studies and political science. In this course students will choose a research topic, perform a considerable amount of readings in the secondary literature, make a research design, and carry out the research necessary to write a senior thesis next semester. Intended for Environmental Studies Bachelor of Arts degree.

**ENV 499 Senior Research Paper (3)**  
A major research paper exploring some aspect of environmental studies and/or social policy. The topic is developed in ENV498 during the previous semester. This course is intended for Bachelor of Arts environmental studies majors. Intended for Environmental Studies Bachelor of Arts degree. Prerequisite: ENV498.

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**Page 181   Accounting – Bachelor of Arts – (Update)**  

**Major in Accounting**

**Foundation Courses (24-25 semester hours)**

- MTH 161 Mathematical Methods for Business and Social Sciences  
  -or- MTH 171 Calculus I  
- MTH 201 Introduction to Statistics  
- ECN 201 Principles of Microeconomics  
- ECN 202 Principles of Macroeconomics  
- ACC 201 Principles of Accounting I  
- ACC 202 Principles of Accounting II  
- BA 225 Business Law I  

**Common Professional Component (24 semester hours)**

- BA 300 Finance  
- BA 302 Applied Quantitative Business Techniques  
- BA 305 Business Communications  
- BA 320 Operations Management  
- BA 330 Marketing  
- BA 420 International Business and Global Economics  
- BA 435 Corporate Finance  
- BA 499 Business Strategy
Post-Baccalaureate Teacher Certification (Certification Only)

Students who already possess a bachelor’s degree can pursue a teaching certificate program as a non-degree seeking student at Saint Martin’s University. Upon successful completion of the requirements listed in part below, students will be eligible to be certified as a teacher in the state of Washington. This path to certification is typically called the post-baccalaureate program or the certification-only program.

The College of Education and Counseling Psychology breaks down the requirements for certification into six main categories: General Education, Pre-Professional, Education Core, Education Methods, Second Endorsement and Internship. Since the students in the post-baccalaureate program already possess a bachelor’s degree, they are not required to meet the General Education requirements that undergraduate students must meet for their bachelor’s degree. They must, however, meet all other requirement categories as required by Washington State law.

Pre-Professional Requirement

Pre-Professional Requirements are meant to ensure that a teaching candidate possesses the necessary basic skills to perform well in the classroom. Some courses overlap with Saint Martin’s University’s General Education Requirements, but, in the case of the post-baccalaureate student, must be completed prior to full acceptance into the education program according to state law, if they were not already completed as part of the student’s bachelor’s degree program. These courses equal a total of 24 credit hours. Pre-Professional Requirements are as follows:

- ENG 101 (3) College Writing I
- ENG 102 (3) College Writing II
- COM 106 (3) Public Address or THR 211 (3) Acting I
- MTH 201 (3) Introduction to Statistics
- PSY 101 (3) Introduction to Psychology
- SOC 396 (3) Intercultural Communication or ED 202 (3) Diversity in Educational Systems
- ED 204 (3) Introduction to Education
- ED 205 (3) Child and Adolescent Development or PSY 205 (3) Child and Adolescent Development
- US History (3) (for elementary education only)
- World History (3) (for elementary education only)
- Natural Science with lab (4-5) for elementary education only

Education Core Requirement

Once Pre-Professional requirements are met, students who are accepted into the program at the post-baccalaureate level then begin with the Education Core Requirements. These seven courses form the core of every education student’s instruction at Saint Martin’s University, laying the foundation for
successful teachers in the classroom. These courses, equaling 23 credit hours, also include practicum hours and a non-credit Practicum class that allow students to gain experience in a real classroom setting. The Core Requirements are as follows:

ED 304 (1) Practicum Level 1*
ED 306 (3) Curriculum & Instruction*
ED 360 (3) Classroom Management*
TED312 (3) Technology in the Classroom
ED 371 (2) Educational Law
ED 383 (2) Issues of Abuse/Teacher as Counselor
SED359 (3) Introduction to Exceptionality
ED426 (3) Methods of Teaching Language Acquisition
ED 470 (3) Classroom Assessment

*These courses are pre-requisites for all other education classes in the program.

**Education Methods Requirement**

When the Education Core requirements are successfully completed, the student will then proceed to the Education Methods Requirements. These courses focus on instruction in pedagogy, which will introduce teaching candidates to the methods they will use on a daily basis in the classroom. Depending on the student’s program plan, they will take either the Elementary Education Methods Requirement block or the Secondary Education Methods Requirement block. These blocks of methods instruction are specialized for the age and content level the student plans to teach.

The Elementary Education Methods Requirements total 34 credit hours and are listed as follows:

ED 408 (1) Practicum Level 2
ED 411 (3) Methods of Teaching Math
ED 415 (3) Methods of Teaching Science
ED 418 (3) Methods of Teaching Social Studies
ED 419 (3) Methods of Teaching Language Arts
ED 429 (3) Arts and Movement
ED 438 (3) Literature for Children and Young Adults
ED 474 (2) Primary Reading/Writing Instruction
ED 476 (2) Content-Area Reading for Elementary Teachers
ED 492 (3) Elementary Education Practicum

The Secondary Education Methods Requirements total 11 credit hours and are listed as follows:

ED 408 (1) Practicum Level 2
ED 482 (2) Reading Assessment and Intervention for Secondary Teachers
ED 484 (3) Secondary Methods
ED 485 (2) Content-Area Reading for Secondary Teachers
ED 487 (3) Secondary Methods Practicum/Seminar
Students who wish to pursue teaching in a special education environment must choose one of the tracks as listed above, as well as complete the Special Education Core Requirements. These classes are a mix of specialized area knowledge and methods geared specifically for exceptional learners. This path is not a stand-alone area of endorsement and must be completed in tandem with either Elementary Education or a Secondary Education subject-area specialty. The Special Education Core Requirements total 28 credit hours and are listed as follows:

ED 424 (3) Early Childhood Education or ED 426 (3) Methods of Teaching Language Acquisition (for grades P-3)
SED445 (3) School Drug Prevention and Counseling (for grades 4 and up)
SED461 (3) Instructional Methods of Exceptional Learners
SED463 (3) Management Strategies for Exceptional Learners
SED465 (3) Transitions to Adulthood for Exceptional Learners
SED466 (3) Assessment of Exceptional Learners
SED467 (3) Legal Issues and the IFSP/IEP
SED469 (3) Practicum in Special Education
ED 477 (4) Reading Diagnosis

Second Endorsement Requirement
All teaching candidates at Saint Martin’s University are required to pursue two endorsements for their teaching certificate. For students pursuing Elementary Education, this track of study counts toward one endorsement (in Elementary Education), and therefore the student must complete the state-mandated requirements to satisfy one additional endorsement. For Elementary Education students, a second endorsement can be completed with as few as 6 additional credit hours or as many as 42. Students pursuing the Secondary Education track must choose an additional endorsement that may or may not be related to their initial subject area endorsement typically satisfied by their bachelor’s degree coursework (e.g. a BA in History would satisfy many requirements in both the History and Social Studies endorsements, or a BS in Biology would satisfy many requirements in Biology and Mid-level Science endorsements). For Secondary Education students, a second endorsement can be completed in as few as 3 additional credit hours or as many as 30. The courses required for each endorsement are available in the College of Education and Counseling Psychology main office and must be signed by the Dean of the College and the Certification Specialist prior to certification. Any coursework required in addition to the Pre-Professional, Education Core, and Education Methods for an endorsement must be completed prior to the Internship Requirement of the program.

Internship Requirement
Once the Pre-Professional, Education Core, and Education Methods requirements have been met, and all endorsement coursework is complete, the student will complete the program with a semester-long (16 week) Student Teaching Internship. During this phase of the program, the student is well prepared to teach in a classroom setting for an extended period of time and can further hone the skills they will need to begin a successful teaching career. The Internship requirement involves 16 weeks of classroom time, having been placed by Saint Martin’s University’s Placement Specialist in a school with whom there is an internship/practicum agreement, where the student plans and teaches lessons, manages the
classroom with the supervision of a mentor teacher, and completes objectives for the final state-mandated testing called edTPA (Education Teacher Performance Assessment). In addition to 10 credit hours of internship, the student will also take a 2 credit hour seminar to accompany the internship where students will convene in the university classroom to discuss their internship experiences and complete other program tasks required for certification.

**Elementary Education** or Secondary Education track students take the following internship and seminar pair:

- ED 494 (10) Teacher Internship
- ED 498 (2) Teacher Internship Seminar

**Special Education** track students, who have completed requirements for Elementary or Secondary tracks, take the following internship and seminar pair specific to special education in lieu of the corresponding pair listed above:

- SED493 (10) Internship: Special Education
- ED 498 (2) Teacher Internship Seminar

Once the internship is successfully completed, the student may be eligible for certification if the student has completed the accompanying state required assessments and tests. In addition to passing the edTPA (objectives for which are completed during the 16 week internship), students must also pass a corresponding WEST-E or NES subject area test for the endorsements they pursue. Only after successful completion of coursework, internship, and assessments are students eligible to be recommended for teacher certification.

In summary, students pursuing a post-baccalaureate teaching certificate must complete the following based on the program plans outlined above:

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Page 211  ED 477 – Change

ED 477  Reading Diagnosis (3)
Explores the area of reading disabilities. Candidates learn when and how to use various assessments and instructional strategies to help struggling readers. Analysis of reading behavior using informal reading inventories, miscue analysis and other assessment tools. Includes a 10 hour practicum in a weekly tutoring experience, diagnosing children, planning and implementation instruction. Prerequisites: ED 419, ED 474, ED 476

Page 223  Computer Science Minor (18 semester hours) – Correction

- CSC 101 Introduction to Computer Science
- 15 additional semester hours in computer science or mathematics from the following list. At most 3 semester hours may be in mathematics. The program must be approved by the minor advisor and department chair, with at least 6 semester hours at the 300 or 400 level. No more than six credits from the requirements for a major can also be counted toward the CSC minor.

  o CSC 180 Introduction to Programming
  o CSC 210 Database Fundamentals
  o CSC 200 Intermediate Programming
  o CSC 215 Network Fundamentals
  o CSC 230 Introduction to Web Development
  o CSC 250 Web Programming and Management
  o CSC 310 Database Design
  o CSC 340 Data Structures and Algorithms
  o CSC 345 Data Communications and Networking
  o CSC 360 Introduction to Data Analysis
  o CSC 380 Administering and Managing Databases
  o CSC 385 Operating System Architecture
  o CSC 395 Special Topics
  o CSC 415 Data Mining
  o CSC 446 Software Engineering: Analysis and Design
  o CSC 455 Cloud Technologies
  o CSC 463 Data Visualization Tools
  o CSC 475 Designing Business Intelligence Solutions
  o CSC 480 Senior Project

Page 223  Computer Science Certificate (18 semester hours) – Addition
- CSC 101 Introduction to Computer Science
- 15 additional semester hours in computer science or mathematics from the following list. At most 3 semester hours may be in mathematics. The program must be approved by the minor advisor and department chair, with at least 6 semester hours at the 300 or 400 level.
  
  - CSC 180 Introduction to Programming
  - CSC 210 Database Fundamentals
  - CSC 200 Intermediate Programming
  - CSC 215 Network Fundamentals
  - CSC 230 Introduction to Web Development
  - CSC 250 Web Programming and Management
  - CSC 310 Database Design
  - CSC 340 Data Structures and Algorithms
  - CSC 345 Data Communications and Networking
  - CSC 360 Introduction to Data Analysis
  - CSC 380 Administering and Managing Databases
  - CSC 385 Operating System Architecture
  - CSC 395 Special Topics
  - CSC 415 Data Mining
  - CSC 446 Software Engineering: Analysis and Design
  - CSC 455 Cloud Technologies
  - CSC 463 Data Visualization Tools
  - CSC 475 Designing Business Intelligence Solutions
  - CSC 480 Senior Project
  - MTH 121 Precalculus
  - MTH 200 Mathematics for Computer Science
  - MTH 201 Introduction to Statistics

**ME 405 – Addition**

**ME 405  Structural Composites (3)**
Macro-behavior of a lamina. Stress transfer of short fiber composites. Classical lamination theory, static analysis of laminated plates, free-edge effect, failure modes. Prerequisite: ME 300