

# RIVER STUDIES AND LEADERSHIP CERTIFICATE, UNDERGRADUATE

In the River Studies & Leadership Certificate program, students study the functions of diverse bodies of water, take measurements in field work, and learn how to guide rafts on whitewater rivers.

Note: courses taken to satisfy core requirements **cannot** be used to satisfy emphasis area courses, i.e. no double-dipping.

As a part of the RSLC program, River Management Society (RMS) offers students exciting opportunities for professional networking and collaboration. Students are encouraged to use RMS as a source for their river studies and professional networking. Each student receives an RMS student membership that can be renewed until they graduate. which includes a subscription to the RMS Journal and access to national and regional chapter events (e.g. chapter floats, river field trips & workshops, swiftwater rescue courses, etc.). They are invited to attend either the biennial River Management Symposium or comparable event supported by RMS for which registration fees are waived scholarships are available to help defer other expenses. More information about the RMS and available resources can be found on the RMS (<https://www.river-management.org/>) site.

## Required Core Courses

### Geographic Information Science

GEOS 323	GEOGRAPHIC INFORMATION SYSTEMS I: SPATIAL ANALYSIS FOR ENVIRONMENTAL SCIENCES	5
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### River Science—choose one

BIOL 445	STREAM ECOLOGY	5
or GEOS 203	FUNDAMENTALS OF SURFACE HYDROLOGY	
or GEOS 413	RIVERS AND FLOODS	

### River Policy

PLAN 431	ENVIRONMENTAL IMPACT STATEMENTS	3-5
or POLI 324	COMPARATIVE AND INTERNATIONAL WATER POLICY	

### Swiftwater Rescue—choose one

RCLS 330	INTERMEDIATE WHITEWATER KAYAKING	2-4
or RCLS 375	WHITEWATER RAFTING GUIDE TECHNIQUES	

Relevant experience or training can satisfy this requirement with approval from the certificate coordinator.

**Emphasis Coursework—complete one of the following emphasis areas** 7-10

#### River Science Emphasis Area—choose two courses

BIOL 405	LIMNOLOGY
BIOL 445	STREAM ECOLOGY
BIOL 446	RIPARIAN ECOLOGY
BIOL 462	ICHTHYOLOGY
GEOS 203	FUNDAMENTALS OF SURFACE HYDROLOGY
GEOS 413	RIVERS AND FLOODS

#### River-based Policy and Management Emphasis Area—choose two courses

BIOL 442	CONSERVATION BIOLOGY
BIOL 463	FISHERIES BIOLOGY AND MANAGEMENT
GEOS 235	ENERGY/WATER NEXUS

GEOS 315	WATER RESOURCES
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GEOS 317	RESOURCES AND CONSERVATION
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**River-based Recreation, Education, and Tourism Emphasis Area—choose both**

RCLS 313	PUBLIC LANDS AND OUTDOOR RECREATION
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RCLS 370	OUTDOOR RECREATION AQUATIC PROGRAMS
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### Additional Requirements

Professional experience requirement: Students are required to take two credits in the form of an internship, independent study, or other professional experience 2

Oral/written presentation requirement: students are required to either present aspects of their work at an RMS Symposium or sponsored conference or write an article for the RMS Journal about their experiences

**Total Credits** 24-31