NOTE to prospective students: This syllabus is intended to provide students who are considering taking this course an idea of what they will be learning. A more detailed syllabus will be available on the course site for enrolled students and may be more current than this sample syllabus. Summer term courses may be accelerated – please check the Ecampus Schedule of Classes for more information.

COURSE NUMBER    FW 580
COURSE NAME      STREAM ECOLOGY – 5 credits

COURSE CREDIT
(5) This course combines approximately 150 hours of instruction, online activities, and assignments for 5 credits.

PREREQUISITES, CO-REQUISITES AND ENFORCED PREREQUISITES
9 credits of upper-division science

COURSE DESCRIPTION:
Structure and function of stream ecosystems, with emphasis on biological processes; physical and chemical relations; riparian influences and landscape perspectives.

FW 456. LIMNOLOGY (5).$ Physical, chemical, and biological concepts in limnology and techniques related to aquatic resources and their management. Lec/lab. PREREQS: Senior standing.

CONTACT INFORMATION:
Please post all course-related questions in the General Discussion Forum so that the whole class may benefit from our conversation. Please email your instructor for matters of a personal nature. I will reply to course-related questions and email within 24-48 hours. I will strive to return your assignments and grades for course activities to you within five days of the due date.

For more information, contact: BRUCE DUGGER, NASH 166, 541-737-2465

Sample syllabi may not have the most up-to-date information. For accuracy, please check the Ecampus Schedule of Classes to see the most current instructor information. You can search for contact information by name from the OSU Home Page.
LEARNING RESOURCES:
The required text for the course will be:

Optional readings:
This text is an excellent text on stream ecology with many applications drawn from the Pacific Northwest. Students are not required to read this text.

Additional papers have been selected from the literature and will be available through the OSU Library as permalinks.

NOTE: For textbook accuracy, please always check the textbook list at the OSU Bookstore website. Sample syllabi may not have the most up-to-date information.
Students can also click the ‘OSU Beaver Store’ link associated with the course information in the Ecampus schedule of classes for course textbook information and ordering.

COURSE SPECIFIC MEASURABLE STUDENT LEARNING OUTCOMES:
By the end of this course, students will be able to:

- Understand the physical properties of streams and those environmental processes that influence the chemical, and biological dynamics of streams
- Understand the fundamental chemical characteristics of water quality, including temperature, dissolved oxygen, and biologically important nutrients.
- Understand the fundamental biological habitats and process that shape aquatic populations, communities and ecosystems.
- Understand fundamental relationships in population dynamics of aquatic organisms
- Understand community interactions and their influence on biodiversity
- Understand the properties of lotic ecosystems
- Be able to determine the types of information required to assess the environmental status and trends of streams and rivers
- Analyze aquatic data to assess the status and trends of aquatic ecosystems based on the fundamental principles
- Explain the relationships that shape stream and river ecosystems
- Apply their understanding of aquatic ecosystems in new settings and problem solving
- Synthesize multiple sources of ecosystem-based information and develop ecologically sound management actions and plans

COURSE CONTENT AND POLICIES:

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stream ecosystems/ River continuum concept</td>
<td>Hydraulics and channel morphology</td>
</tr>
<tr>
<td>1,14</td>
<td>14, 3, 5</td>
</tr>
<tr>
<td>1, 2</td>
<td>3, 19</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
### EVALUATION OF STUDENT PERFORMANCE:

Grades will be based on an examination on quantitative relationships and technical information (25%), discussion topics (40%), and a final exam (35%).

<table>
<thead>
<tr>
<th>Assessments</th>
<th>Percent of Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical examination</td>
<td>25%</td>
</tr>
<tr>
<td>Discussion topic 1</td>
<td>5%</td>
</tr>
<tr>
<td>Discussion topic 2</td>
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<tr>
<td>Discussion topic 3</td>
<td>5%</td>
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<tr>
<td>Discussion topic 4</td>
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<tr>
<td>Discussion topic 5</td>
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<td>Discussion topic 7</td>
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<tr>
<td>Discussion topic 8</td>
<td>5%</td>
</tr>
<tr>
<td>Final Examination</td>
<td>30%</td>
</tr>
</tbody>
</table>

#### Technical Examination

The Technical Exam will be available on Canvas starting 4:00 AM PST on Saturday, February 14th and must be downloaded, completed, and resubmitted before 8:00 AM PST on Tuesday, February 17th. Students must download the test and complete the exam and upload their completed exam onto the Canvas website within three hours. The exam must be downloaded and uploaded as either an MSWord file or a Rich Text Format file (*.rtf).

The technical exam will be a short-answer examination on quantitative relationships and technical information presented in lecture. The exam is a closed-book exam with no use of notes, texts, people, or other sources. The exam will cover information in lectures and readings. The examination will focus on scientific terms, quantitative relationships, and simple calculations related to physical, chemical, and biological processes. A calculator is required for the examination. The exam will be designed to
emphasize fundamental concepts, terms, and relationships in stream ecosystems. The exam is weighted less than the final exam, representing 25% of the total grade.

**Discussion Topics**
Each student will submit a total of eight Discussion Board assignments. The Introduction to the class during the first week does not count. During the course, each student will post the responses within the week that the assignment is due. Each posting should be at least 300 words. You are not limited to the assigned posts—this is the minimum required but I encourage you to enjoy the discussions and add as many threads as you wish.

Each student will be graded on quality of the information or responses in the posts and technical accuracy and relation to course content. The grade also will be based on evidence of constructive and relevant responses to other posts.

All Discussion Board assignments must be posted on Canvas by 8:00 AM (Pacific Time Zone) of the Monday following the assignment week. For example, Week 2 will be January 12-18. The assignment for Week 2 must be posted any time during Week 2 before 8:00 AM on January 19 (OSU time). Please do not post assignments prior to the week in which they are due. Grades on the Discussion Board assignments will be posted within one week after the due date.

**Final**
The Final Exam will be available on Canvas starting 4:00 AM PST on Saturday, March 14th and must be downloaded, completed, and resubmitted before 8:00 AM PST on Tuesday, March 17th. The final will consist of a cumulative exam based on a combination of conceptual questions and more specific short answer questions about lecture material and information in the required readings. All exams are comprehensive and draw from all information presented in lecture, laboratory, and assigned readings. Complete sentences, correct grammatical construction, and correct spelling are required on exams and reports. The exam must be downloaded and uploaded as a Word file. Make arrangements with the instructors if you need to alternate word processing software.

**Grading Scale**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93.4-100%</td>
</tr>
<tr>
<td>A-</td>
<td>90.0-93.3%</td>
</tr>
<tr>
<td>B+</td>
<td>86.7-89.9%</td>
</tr>
<tr>
<td>B</td>
<td>83.4-86.6%</td>
</tr>
<tr>
<td>B-</td>
<td>80.0-83.3%</td>
</tr>
<tr>
<td>C+</td>
<td>76.7-79.9%</td>
</tr>
<tr>
<td>C</td>
<td>73.4-76.6%</td>
</tr>
<tr>
<td>C-</td>
<td>70.0-73.3%</td>
</tr>
<tr>
<td>D+</td>
<td>66.7-69.9%</td>
</tr>
<tr>
<td>D</td>
<td>63.4-66.7%</td>
</tr>
<tr>
<td>D-</td>
<td>60.0-63.3%</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60%</td>
</tr>
</tbody>
</table>

**COURSE SITE LOGIN INFORMATION**
Information on how to login to your course site can be found [HERE](#).

**STATEMENT REGARDING STUDENTS WITH DISABILITIES**
Oregon State University is committed to student success; however, we do not require students to use accommodations nor will we provide them unless they are requested by the student. The student, as a legal adult, is responsible to request appropriate
accommodations. The student must take the lead in applying to Disability Access Services (DAS) and submit requests for accommodations each term through DAS Online. OSU students apply to DAS and request accommodations at our Getting Started with DAS page.

Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Additionally, Canvas, the learning management system through which this course is offered, provides a vendor statement certifying how the platform is accessible to students with disabilities.

ACADEMIC INTEGRITY AND STUDENT CONDUCT (OSU POLICY)

Students are expected to be honest and ethical in their academic work. Intentional acts of academic dishonesty such as cheating or plagiarism may be penalized by imposing an “F” grade in the course.

Student conduct is governed by the universities policies, as explained in the Office of the Dean of Student Life: Student Conduct and Community Standards. In an academic community, students and faculty, and staff each have responsibility for maintaining an appropriate learning environment, whether online or in the classroom. Students, faculty, and staff have the responsibility to treat each other with understanding, dignity, and respect.

Students are expected to conduct themselves in the course (e.g. on discussion boards, email postings, etc.) in compliance with the university's regulations regarding civility. Students will be expected to treat all others with the same respect as they would want afforded to themselves. Disrespectful behavior (such as harassing behavior, personal insults, inappropriate language) or disruptive behaviors are unacceptable and can result in sanctions as defined by Student Conduct and Community Standards.

For more info on these topics please see:

- Statement of Expectations for Student Conduct
- Student Conduct and Community Standards - Offenses
- Policy On Disruptive Behavior

PLAGIARISM
You are expected to submit your own work in all your assignments, postings to the discussion board, and other communications, and to clearly give credit to the work of others when you use it. Academic dishonesty will result in a grade of “F.”

- Statement of Expectations for Student Conduct
- Avoiding Academic Dishonesty

TECHNICAL ASSISTANCE
If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the OSU Computer Helpdesk online.

- COURSE DEMO
- GETTING STARTED

TUTORING
For information about possible tutoring for this course, please visit our Ecampus NetTutor page. Other resources include:

- Writing Center
- Online Writing Lab

STUDENT EVALUATION OF TEACHING
The online Student Evaluation of Teaching form will be available in week 9 and close at the end of finals week. Students will be sent instructions via ONID by the Office of Academic Programs, Assessment, and Accreditation. Students will log in to “Student Online Services” to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted. Course evaluation results are very important and are used to help improve courses and the learning experience of future students. Results from questions are tabulated anonymously and go directly to instructors and unit heads/supervisors. Unless a comment is “signed,” which will associate a name with a comment, student comments on the open-ended questions are anonymous and forwarded to each instructor. “Signed” comments are forwarded to the unit head/supervisor.

REFUND POLICY INFORMATION
Please see the Ecampus website for policy information on refunds and late fees.