



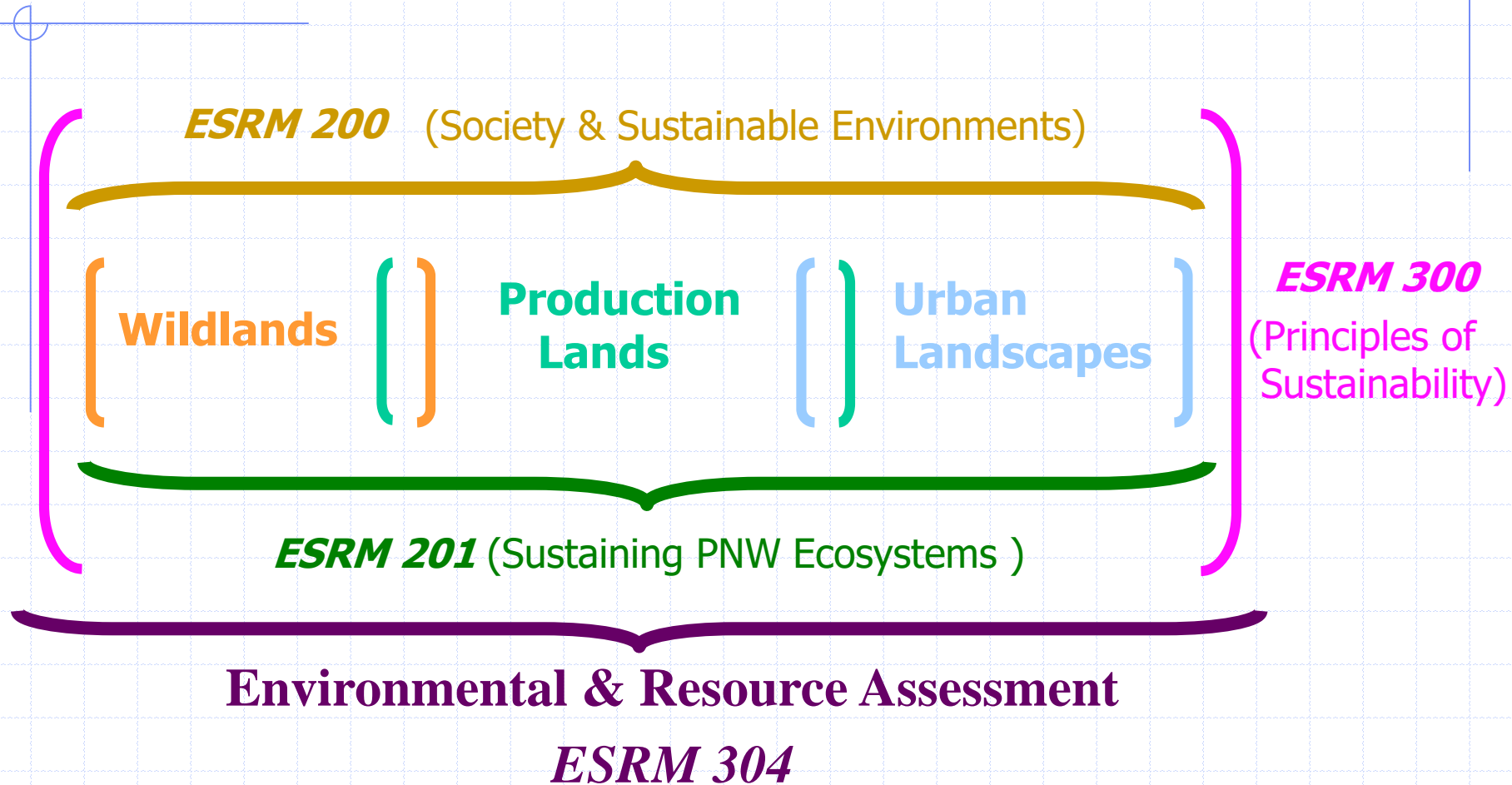
ESRM 304

Environmental and Resource Assessment

Environmental and Resource Assessment

- ◆ One of the interdisciplinary courses comprising the *core* of the **Environmental Science and Resource Management (ESRM)** major in the School of Environmental & Forest Sciences (**SEFS**)
 - 200 – Society and Sustainable Environments
 - 201 – Sustaining PNW Ecosystems
 - 300 – Principles of Sustainability
 - **304** – Environmental & Resource Assessment

Environmental Science and Resource Management



Environmental Science and Resource Management

◆ All the core courses support the ESRM major in the SEFS and its transcribed *options*

- Landscape Ecology & Conservation
- Restoration Ecology & Environmental Horticulture
- Sustainable Forest Management
- Wildlife Conservation

Course Goals

- ◆ introduce the **methods** of how *scientific investigation* is done,
- ◆ demonstrate how scientists from different disciplines **use** basic *assessment methods* in their specialty, and
- ◆ appreciate how these methods are **integrated** in the context of larger *environmental & resource surveys* and interdisciplinary problem solving

Hands-on Field Experience

- ◆ Concepts and Skills taught will be focused and presented in weekly modules
- ◆ Most weekly modules will be comprised of *both* class and either a laboratory period or a **field trip** (4 hr). Field sites provide suitable resources for demonstration & application of assessment methods

Hands-on Field Experience



Hands-on Field Experience

◆ Field trips are **REQUIRED**

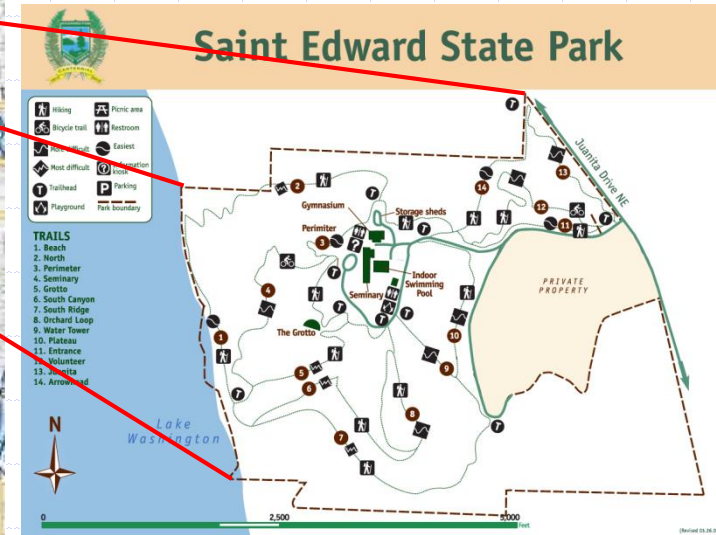
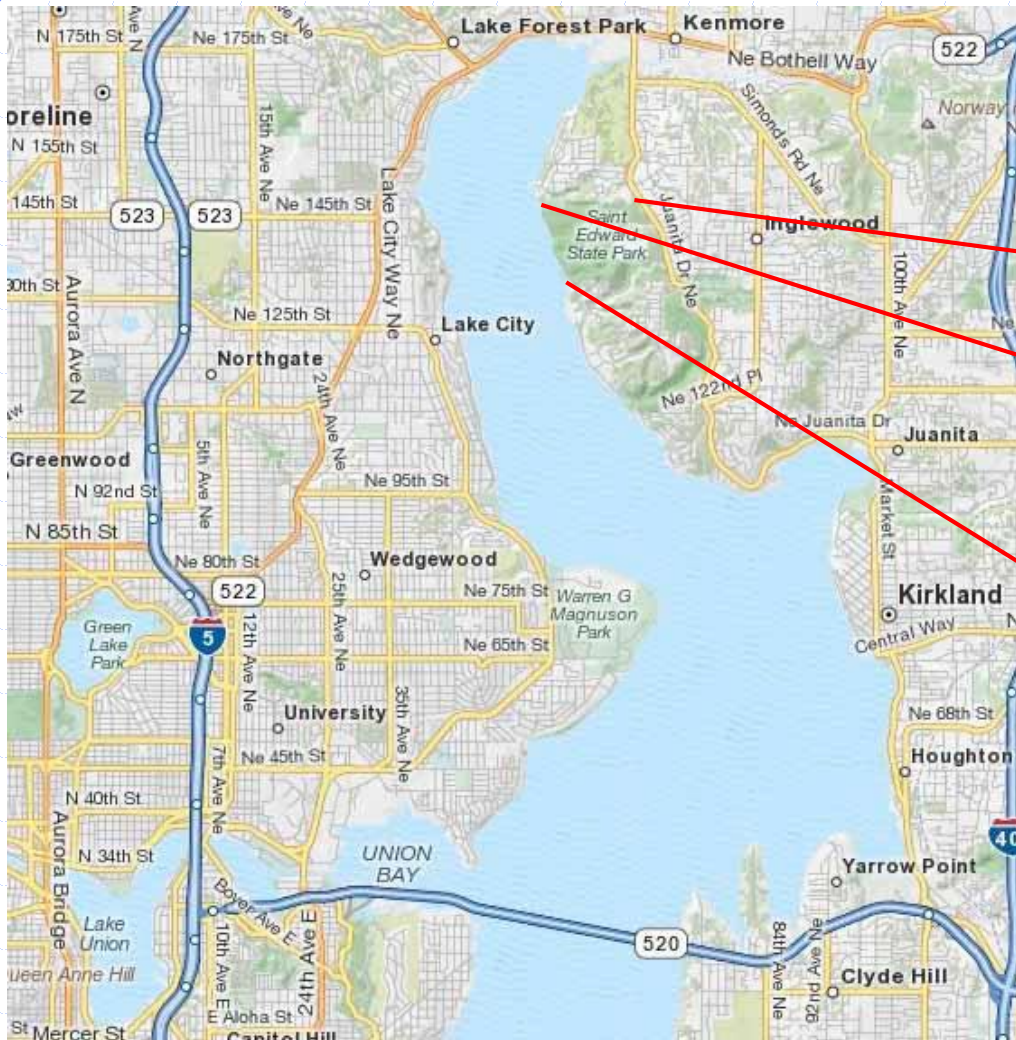
- Gather in C-10 Parking Lot (btwn BLD & WFS)
- Be on time: Depart at 12:30PM *sharp* !
- Clothe yourselves appropriately !
 - ◆ Sturdy footwear: closed-toe
 - ◆ Long pants / full rain suit

◆ Zero chance for Field trip make-up

- Lowest score dropped

◆ “I hear – I forget; I see – I remember;
I do – I *understand*”

St. Edward State Park Location & Trails Map



St. Edward State Park Location & Trails Map

St. Edward State Park and Bastyr University



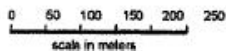
**Cascade
Orienteering
Club**

PO Box 31375
Seattle, WA 98108
206-783-3866
www.cascadeoc.org

For more information
about orienteering:
www.pnwo.org



SCALE 1:10,000
contour interval 5 meters



magnetic
north

- | | | | |
|--|----------------|--|-------------------------------------|
| | building, ruin | | foot path: small, indistinct |
| | out of bounds | | stream: small, intermittent |
| | power line | | contour (5m), form line |
| | paved road | | crossable fence, rock wall |
| | vehicle track | | small knoll, large knoll |
| | foot path | | depression, pit, rootstock |
| | spring, marsh | | water source, manhole, fire hydrant |
| | | | boulder, fire ring, man made object |
| | | | stump, single tree |
| | | | distinct forest edge |
| | | | distinct vegetation boundary |
| | | | vegetation: slow, medium, light |
| | | | open land, rough open land |
| | | | orchard |
| | | | dirt bank |
| | | | ditch |
| | | | bike gate |
| | | | tower |

Juanita Drive

Bastyr
University

Lake Washington

Original Fieldwork: Mike Schuh (1982)
Lars Holmquist, Per Claef Svensk (1982)
Original Cartography: Debbie Hewes (1983)
Fieldwork Updates: David Tallent (12/2003)
OCAD Cartography: David Tallent (12/2003)

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Cascade Orienteering Club

Weekly Module Topics

- ◆ **Module 1:** Scientific Method, Field Tools
- ◆ **Module 2:** Soils and Microclimate
- ◆ **Module 3:** Ground Cover / Lower Canopy
- ◆ **Module 4:** Social Environment
- ◆ **Module 5:** Wildlife population sampling
- ◆ **Module 6:** Surveying & Navigation
- ◆ **Module 7:** Stream Ecology / Hydrology
- ◆ **Module 8:** Remote Sensing & GIS
- ◆ **Module 9:** Tree cover / Upper canopy
- ◆ **Integration:** Assessment Strategy Puzzles

Module Topics and Instructors

◆ Sci. Method in Nat. Resources	E Turnblom
◆ Soils and Microclimate	D Vogt
◆ Lower Canopy Sampling	E Turnblom
◆ Social Environment	M Lenentine
◆ Wildlife population sampling	A Wirsing
◆ Surveying & Navigation	K Ewing
◆ Stream Ecology / Hydrology	C Means
◆ Remote Sensing & GIS	LM Moskal
◆ Tree cover / Upper canopy	E Turnblom
◆ Teaching Assistance	R Swan

Requirements/Grading

- ◆ 1) Individual Module Grades. The percentage grade for each instructional module will be averaged to develop the score for this component. Represents 75% of grade.
- ◆ 2) Final Exam. The exam date is Wednesday Dec 13th from 8:30-10:20AM in this classroom (WFS 201). The final represents 15% of grade.
- ◆ 3) Participation / Effort. Students are expected to participate actively in all class & field activities. Represents 10% of grade.

ESRM 304 Resource Materials

◆ **web site:**

courses.washington.edu/esrm304a

– class PPTs & other materials placed here

◆ **Field site materials**

Distributed in class, as needed

◆ **Readings and handouts**

On website and in class, periodically

ESRM 304 Resource Materials

◆ Reading Assignment

- “Read This! Study Tips”

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http://courses.washington.edu/esrm304a/lectures/Module 1/ReadThis!_StudyTips.pdf