Proposal for the Initiation of New Instructional Program Leading to the Graduate Certificate in Fisheries Management

Oregon State University
College of Oceanic and Atmospheric Sciences
Marine Resource Management Program
and the
College of Agricultural Sciences
Department of Fisheries and Wildlife

1. Program Overview

a) Proposed CIP Number: 03.0301

b) Provide a brief overview (approximately 1-2 paragraphs) of the proposed program, including a description of the academic area and a rationale for offering this program at the present time.

Fishery agencies and the fisheries they manage face unprecedented challenges. Fisheries managers are responsible for achieving sustainable fisheries, including rebuilding over-fished stocks, implementing ecosystem-based approaches, designing global fisheries agreements, sustaining coastal fishing communities, reducing over-capacity, evaluating contributions from aquaculture and increasing the cost-effectiveness of research and management. These challenges require managers and stakeholders to work together as expert problem solvers, leaders, and innovators capable of addressing state, federal and international mandates for sustainable fisheries. As with most natural resources management, fisheries management is a multi-disciplinary exercise that requires participants to have both expertise and breadth. Most importantly, biological scientists, assessment scientists, social scientists, managers and policy-makers need to understand the language and fundamentals of one another’s disciplines.

Making decisions that address complex issues requires a wide range of biological, economic, legal, and social science knowledge and skills. Fisheries managers and fishery stakeholders must also be capable of analyzing ecological and socioeconomic impacts of management decisions at domestic and international levels. However, limited availability of graduate level training means agency staff and stakeholders are often ill-prepared to meet these challenges.

The proposed 18-credit Graduate Certificate in Fisheries Management engages university instructors and scientists, fisheries management professionals and decision-makers, and graduate students in a pedagogy that integrates diverse approaches and perspectives to find effective solutions for complex fisheries management problems at local, state, regional, national and international levels.
The Certificate will be offered with on-campus and extended campus study options, utilizing existing courses taught at Oregon State University.

c) When will the program be operational, if approved?

The on-campus option will be operational immediately on approval. The extended campus option will be fully operational approximately 24 months from approval.

2. Course of Study

a) Proposed Curriculum

The 18 credit Graduate Certificate, utilizing courses currently offered at Oregon State University requires:

- MRM 506 project (3 credits) demonstrating application of knowledge and skills to a fisheries management issue, and
- A minimum of 2 courses and at least 6 credits from the human dimensions subject area list, and
- A minimum of 2 courses and at least 6 credits from the oceanography fisheries biology, ecology and population dynamics: marine fisheries concentration area, or
- A minimum of 2 courses and at least 6 credits from the fisheries biology, ecology and population dynamics: freshwater fisheries concentration area

**On-campus curriculum based on Existing and Relevant Courses**

**Capstone project:**

- MRM 506 Projects (3 credits)

**Human Dimensions subject area:**

- ANTH 581 Natural Resources and Community Values (3 Credits)
- AREC 534 Environmental and Resource Economics (3 credits)
- COMM 540 Theories of Conflict and Conflict Management (3 credits)
- COMM 542 Bargaining and Negotiation Processes (3 credits)
- COMM 544 Third Parties in Dispute Resolution: Mediation and Facilitation (3 credits)
- COMM 546 Communication in International Conflict and Disputes (3 credits)
- FW 620 Ecological Policy (3 credits)
- FW 515 Fisheries and Wildlife Law and Policy (3 credits)
- MRM 530 Principles and Practice of Marine Resource Management (3 credits)
- MRM 535x Rights-based Fisheries Management (3 credits)
- MRM 525 Special Topics/ Ocean Law (3 credits)
- PS 575 Environmental Politics and Policy (4 credits)
• PS 576 Science and Politics (4 credits)
• PS 577 International Environmental Politics and Policy (4 credits)
• SOC 580 Environmental Sociology (4 credits)
• SOC 581 Society and Natural Resources (4 credits)

Oceanography, fisheries biology, ecology and population dynamics subject area: Marine fisheries concentration

• FW 531 Dynamics of Marine Biological Resources (4 credits)
• FW 533 Marine Aquaculture and Aquarium Science (6 credits)
• FW 599 Special Topics/ Fisheries Stock Assessment (2 or 4 credits)
• FW 565 Marine Fisheries (4 credits)
• FW 573 Fish Ecology (4 credits)
• FW 520 Ecology and Management of Marine Fishes (3 credits)
• FW 554 Fishery Biology (5 credits)
• FW 564 Marine Conservation Biology (3 credits)
• FW 574/OC 574 Early Life History of Fishes (4 credits)
• FW 597 Aquaculture (3 credits)
• OC 540 Biological Oceanography (3 credits)

Fisheries biology, ecology and population dynamics subject area: Freshwater fisheries concentration

• FW 573 Fish Ecology (4 credits)
• FW 554 Fishery Biology (5 credits)
• FW 545 Ecological Restoration (4 credits)
• FW 556 Limnology (5 credits)
• FW 571 Environmental Physiology of Fishes (4 credits)
• FW 579 Wetlands and Riparian Ecology (3 credits)
• FW 580 Stream Ecology (3 credits)
• FE 530 Watershed Processes (3 credits)
• TOX 555 Ecotoxicology: Aquatic Ecosystems (3 credits)

The Director of the Certificate program may approve the substitution of a similar course or course at a higher level at his/her discretion on petition by a registered student.

The Director may also approve any other course deemed relevant to the study of fisheries management as a substitute for any of the above courses.

Although individual faculty members will determine the frequency of course offerings and course content. The Director of the Certificate program will ensure the set of courses available at any one time is such that students can complete their program of study in a timely manner.
Extended campus curriculum

The Extended campus curriculum will in the first instance be offered only for the Marine Fisheries Management concentration area. Courses from the broader on-campus curriculum that are now offered as, or will be adapted for, extended campus delivery for the proposed Graduate Certificate program:

The 18 credit Graduate Certificate, utilizing courses currently offered at Oregon State University requires:

- MRM 506 project (3 credits) demonstrating application of knowledge and skills to a fisheries management issue, and
- A minimum of 2 courses and at least 6 credits from the human dimensions subject area list, and
- A minimum of 2 courses and at least 6 credits from the oceanography fisheries biology, ecology and population dynamics: marine fisheries concentration area

Capstone project:

MRM 506 Projects (3 credits)

Human Dimensions Subject Area:

- AREC 534 Environmental and Resource Economics (3 credits)
- AREC 552 Marine and Fishery Economics (3 credits)\(^1\)
- ANTH 581 Natural Resources and Community Values (3 Credits)
- FW 620 Ecological Policy (3 credits)
- MRM 535x Rights-based Fisheries Management of Marine Fisheries (3 credits)
- MRM 525 Special Topics/ Ocean Law (3 credits)
- PS 575 Environmental Politics and Policy (4 credits)
- PS 577 International Environmental Politics and Policy (4 credits)
- SOC 580 Environmental Sociology (4 credits)
- SOC 581 Society and Natural Resources (4 credits)

Fisheries biology, ecology and population dynamics:

- FW 531 Dynamics of Marine Biological Resources (4 credits)
- FW 599 Special Topics/ Fisheries Stock Assessment (4 credits)
- FW 565 Marine Fisheries (4 credits)
- FW 520 Ecology and Management of Marine Fishes (3 credits)
- FW 554 Fisheries Biology (5 credits)

\(^1\) Has not been offered in recent years and may require reactivation or new Category II approval. AREC 534 will serve as a substitute in the first instance.
• FW 564 Marine Conservation Biology (3 credits)

A minimum of three courses will be completed from the human dimensions subject areas and the fisheries biology, ecology and population dynamics subject areas.

The capstone project (MRM 506) will require minimal development for e-campus.

b) Describe New Courses

No new courses will be created for the Graduate Certificate in Marine Fisheries Management.

c) Provide a discussion of any nontraditional learning modes to be utilized in the new courses, including, but not limited to: (1) the role of technology, and (2) the use of career development activities such as internships.

The proposed program has the following non-traditional learning modules:

• An extended campus delivery component targeting professionals and individuals in agencies, organizations and industries with responsibility for assuring sustainability of marine fisheries resources. Faculty will work with extended campus staff to determine the most effective techniques for delivering their courses.

• A teleconferencing system is used in several courses to link lectures at the OSU Corvallis campus, Hatfield Marine Science Center, and University of Oregon Campus in Eugene.

• A Marine Experience internship program, that has modules in commercial fishing, fisheries management, aquaculture industries, and seafood processing, will be optional for students enrolled in the Certificate Program.

• Development of “blended” course offerings that would combine e-campus delivery with on-site experiential learning at the Hatfield Marine Science Center (HMSC). The HMSC is home to 7 federal agency activities, most of which are involved in applied research supporting fisheries management, including conservation of protected species. More than 20 professionals in these agencies hold courtesy appointments at OSU. Many students or professionals who would benefit from the proposed certificate program are at a distance from the OSU campus and would thus focus on the e-campus component. Experiential learning, however, including face-to-face interactions with instructors and with fishery management professionals, may be incorporated into selected courses in intensive periods ranging from one or two weekends to one week. This approach will minimize travel requirements to a location where excellent opportunities for hands-on experience and learning can be gained.
d) What specific learning outcomes will be achieved by students who complete this course of study?

Leaders in fisheries management must be capable of identifying, requesting, analyzing and synthesizing scientific, economic and social information into meaningful policy and management recommendations. Reflecting these needs, graduates of the certificate program will have completed research or internship and courses so that they:

- Understand relevant biophysical and human dimensions of marine fisheries management and can facilitate effective communication between scientists, decision makers, and stakeholders.

- Are able to use the natural and social sciences to evaluate and communicate the costs and benefits of management decisions across social, economic and political dimensions.

In particular graduates will demonstrate competency in many of the following areas: fishery biology, aquaculture, commercial and recreational fisheries management, fishery economics, seafood marketing and quality, cooperative research, community-based management, or marine protected area management. A strong quantitative scientific expertise centered on biological resources is supplemented with a demonstrable understanding of the state, federal and international policy, legal, and socio-economic dimensions of fisheries management.

Graduates through their MRM 506 project will demonstrate:

- Critical thinking, analyzing and evaluating contemporary fisheries management issues from a range of perspectives including those of industry, environmental organizations, government agencies and indigenous peoples.

- Creative thinking, using imagination and creativity to develop positions on and solutions to management challenges.

- Practical thinking, recommending solutions and decisions that are clear to different stakeholders, appropriate to the political, economic, social and biophysical context of the management challenge, and can be implemented with reasonable human and financial resources.

E) Is There a Maximum Time Allowed for A Student to Complete this Program? If so, Please Explain

Students will be subject to normal requirements for completion of a program of study in the Graduate School. For example, on-campus students completing the
certificate as part of a Masters program will have up to seven years to complete the Certificate.

Given the Graduate School’s continuous enrollment policy of at least 3 credits per term, on-campus or e-campus students only enrolled in the Certificate and not taking a leave of absence will complete the Certificate in a maximum of six terms.

3. Accreditation of the Program

The Graduate Certificate in Marine Fisheries Management will not be seeking accreditation by a professional society or other body.

The Program does conform to American Fisheries Society certification and renewal of certification requirements for a Fisheries Professional. This is described in detail at http://www.fisheries.org/html/Revised_Certification_Program_Description2003.shtml

4. Evidence of Need

a) What Evidence Does the Institution have of Need for the Program?

In late 2001, over 60 government, industry, academic, and non-governmental organization leaders from Oceania, North America, and Europe discussed the state of fisheries management training at a workshop held in New Zealand. A review of fisheries management training programs in the US and internationally carried out for the workshop revealed very few certificate programs and no online or distance education programs in fisheries management. Participants agreed that training curricula for graduate students and professionals are presently insufficient to assure competency of current and future fisheries managers and stakeholders.

A recent survey commissioned by Oregon State’s Extended Campus department did not find any online or distance certificate programs in fisheries management suggesting the paucity of graduate/professional training opportunities is little changed since 2001. The Graduate Certificate Program fills this identified training gap by expanding training opportunities for graduate students and pre-service and in-service professionals.

b) Identify Statewide and Institutional Service-Area Employment Needs the Proposed Program Would Assist in Filling

Several recent reports and federal and state actions highlight the need for graduate level training in fisheries management.

A 2002 report from the National Academy of Public Administration Courts, Congress, and Constituencies: Managing Fisheries by Default, focuses on training and employment need for NOAA Fisheries, which faces a loss of one-third of its workforce to retirement in the near future. The report concludes that NOAA
Fisheries needs to recruit and support training of specialists in stock assessment, social science and economics, as well as regulatory specialists.

In 2004 the National Research Council in its publication "Improving the use of the Best Available Scientific Information Available Standard in Fisheries Management" (http://books.nap.edu/catalog/11045.html) stated (page 32): "Some council members may not be conversant in fishery science. Providing more training in scientific principles to council members is one means of making the translation of scientific information more effective.

The December 2006 reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act explicitly recognizes the shortage of post baccalaureate qualified professionals in fisheries management and related specializations. The Act requires a study of whether there is a shortage in the number of individuals with post-baccalaureate degrees in subjects related to fishery science, including fishery oceanography, fishery ecology, and fishery anthropology, who have the ability to conduct high quality scientific research in fishery stock assessment, fishery population dynamics, and related fields, for government, non-profit, and private sector entities;

Oregon’s Department of Fish and Wildlife has asked Oregon State University’s Department of Fisheries and Wildlife to develop a professional development program that provides training at the graduate level for employees of the agency with two or more years of experience. We plan to have an MOU in place by the end of the 07-08 academic year.

c) Characteristics and Numbers of Students

Potential on campus students are those enrolled in graduate programs at Oregon State University and who also wish to obtain a formal qualification in fisheries management as part of their graduate education. Students will be drawn from the College of Oceanography and Atmospheric Sciences, Fisheries and Wildlife, Agricultural and Resource Economics, and Liberal Arts students wishing an applied marine emphasis to their degree. Students taking the Graduate School’s interdisciplinary Environmental Science Masters or PhD are also expected to be interested in the Certificate. A continuous campus enrollment of 20 students is expected with approximately 8-10 new enrollments each year.

Potential off-campus graduate students are seeking graduate level courses in marine fisheries management but cannot find these courses at their home institution. These students may use the certificate as part of their graduate degree program. We expect a relatively low level of enrollment of this category of students in the extended campus component of the Certificate of perhaps one to two students at any time.

Targeted off-campus professionals include:
• US Federal (NOAA, National Park Service, US Fish and Wildlife), State agency marine resource managers (e.g., Dept. of Natural Resources, Dept. of Fish and Wildlife), and non-governmental organization representatives who are hired into fisheries management positions due to certain strengths or administrative skills, but lacking background in fisheries.

• Agency managers and fisheries industry stakeholders serving on fisheries decision-making committees (such as the 8 US Regional Fisheries Management Councils) or as member of an industry cooperative who need stronger background in fisheries management to understand the large volume of information they receive and to become a more effective policy maker and decision-maker.

• Fisheries staff working for Native American tribes to improve the management of fisheries resources under their jurisdiction.

• Professional natural resource managers and stakeholders in other countries (developed and developing) who are "thrust" into fisheries management role as manager or decision-maker and need background in fisheries management in order to develop and implement effective policies and management strategies.

• Professionals who are experts in law, marketing or other areas of business, or policy and who are hired to work with fisheries industry, but have a limited background in fisheries.

• Legislators or government staff serving on or supporting congressional or state level committees focused on marine resources.

• Fisheries agency, industry, and non-governmental organization managers and administrators needing continuing education in fisheries (understanding of current trends in science and management) as a means to maintain certification and/or to achieve promotion within their organization.

Based on current fisheries management and fisheries and wildlife concentration enrollments in the Marine Resources Management program, approximately 10-20 on-campus students are expected to enroll in the certificate. Numbers for Ecampus are more speculative but a conservative estimate of an enrollment of 25 to 30 extended campus students in the program at any one time has been cited for planning purposes. This is based on based on current e-campus enrollment in the Graduate Certificate in Sustainable Natural Resources.

The continuous combined on-campus and extended campus enrollment is expected to be between 35 and 50 students.

d) Other Compelling Reasons
e) Identify any special interest in the program on the part of local or state groups

Oregon Sea Grant and the Oregon Department of Fish and Wildlife have staff involved in fisheries management and actively recruit staff with fisheries management training.

f) Accessibility of the Program

The extended campus component of the Certificate is designed specifically for these professionals and place-bound graduate students. It is expected to have about 20-30 students enrolled at any one time, with 10 to 15 new enrollments each year. Without the Certificate or its offering by distance education, it is unlikely that these students will attend OSU or undertake formal graduate level fisheries management, since existing graduate programs require a minimum of two years in residence to complete.

5. Similar Programs in the State

a) List All Other Similar OUS Programs

There are no similar OUS programs.

b) In What Way, If Any, Will Resources of Other institutions be Shared

The Ocean Law course is offered through the University of Oregon’s Law School and is cross-listed as MRM 525 Special Topics/Ocean Law. The course is delivered to the OSU campus as a telecourse by OSU Media Services.

c) Is there any Projected Impact on Other Institutions on Terms of Student Enrollment and/or Faculty Workload?

This program will not impact other institutions in terms of student enrollment or faculty workload. No more than one or two additional students are expected to take the Ocean Law class in any one year.

6. Resources

a) Identify Program Faculty, Briefly Describing Each Faculty Member's Expertise/Specialization
The proposed Graduate Certificate is an interdisciplinary/multidisciplinary program and its faculty are drawn from many OSU colleges and departments. Key faculty include:

Lorenzo Ciannelli, Assistant Professor, College of Oceanic and Atmospheric Science, OSU: Primary research is on fisheries oceanography and marine ecosystem ecology. Focuses on the study of the the causes of temporal and spatial variations of marine populations. This work revolves around early life stages of fish, as variability at the population level is closely linked to egg, larval and juvenile survival in marine organisms.

Flaxen Conway, Associate Professor and Community Outreach Specialist, Sociology/Oregon Sea Grant Extension: Research focuses on coping with change and transition, leadership education, and cooperative learning and research relevant to natural resource dependent communities. Recent projects include evaluating the human dimensions of cooperative fisheries research, the Port Liaison Project, and the Groundfish Disaster Outreach Program.

Lori Cramer, Associate Professor, Sociology, OSU: Specialties include natural resource sociology, environmental sociology, social impact assessment, and rural sociology. Research focuses on resource use and social change in Oregon communities, including challenges in Pacific Northwest fishing communities.

Vladlena Gertseva, Assistant Professor Cooperative Institute for Marine Resources Studies, OSU: Interests lie in studying spatial and temporal dynamics of ecological systems of different levels, such as populations and communities.

Michael Harte, Director and Professor, Marine Resource Management/Oregon Sea Grant, OSU: Interests are coastal and marine policy development, collaborative fisheries management, developing human capacity for fisheries management, comparative risk assessment, and decision support systems. He has served as commercial fisheries and economic policy advisor for the Falkland Islands Government and General Manager, Policy and Science for the New Zealand Seafood Industry Council Management).

Scott Heppell, Assistant Professor, Fisheries and Wildlife, OSU: Specialty is fish physiology. Research interests include physiological ecology of marine fishes, in particular how physiology, behavior, and life history traits affect the interactions between marine fish stocks and their respective fisheries.

Selina Heppell, Assistant Professor, Fisheries and Wildlife, OSU: Expertise in population ecology, marine fisheries ecology, conservation biology, and life history evolution. Research includes computer modeling and simulation to understand how marine animals respond to human impacts and climate change.
Richard Hildreth, Professor, University of Oregon School of Law; Co-director, Ocean and Coastal Law Center: Expertise in ocean and coastal law; water law; sustainable development. Has taught Ocean Law and Coastal Law via teleconference with OSU campus for several years.

Robert Lackey, U.S.E.P.A., Courtesy Professor, Fisheries and Wildlife, OSU: Expertise includes ecological policy; salmon restoration; biological resource management; fisheries and wildlife management; environmental protection; and ecological risk assessment.

Denise Lach, Associate Professor, Sociology, OSU: Specialties include environmental sociology, applied sociology, social impact assessment, program evaluation, organizational development and sociology, and conflict and dispute resolution. Current research includes examination of changing roles and expectations for science and scientists in natural resource decision making.

Chris Langdon, Professor, Fisheries and Wildlife, OSU: Specializes in aquaculture of marine fish and bivalve mollusks as well as development of polyculture systems. Current projects include broodstock management and selection of Pacific oysters, development of microparticulate diets for marine fish larvae and sustainable aquaculture in developing countries.

Jessica Miller, Assistant Professor, Fisheries and Wildlife, OSU: Focuses on the ecology and evolution of life history diversity in fishes and the development and maintenance of that diversity. Research specializes on larval dispersal and transport, population connectivity and structure, and the use of estuaries by larval and juvenile marine and anadromous fishes.

Andrew Plantinga, Associate Professor, Agricultural and Resource Economics, OSU: Research emphasis is on the economics of land use, climate change, and forests. Current projects include market-level models of optimal resource use under uncertainty.

David Sampson, Fisheries and Wildlife, OSU: Expertise in marine fisheries science; population dynamics and stock assessment. Research includes development of models of fishermen's behavior with regard to choices for fishing location and fishing technology, bioeconomic models of the fish stock-fishermen system, and methods for assessing the status of fish stocks.

Brent Steel, Professor, Political Science, OSU; Director, Master of Public Policy Program: Expertise in environmental and natural resource policy issues from a domestic and international perspective. Fisheries related research explores peoples' knowledge and values and how these shape attitudes towards, and development of marine policy.
Gil Sylvia, Professor, Agricultural and Resource Economics and Superintendent, Coastal Oregon Marine Experiment Station, OSU: Research interests are seafood marketing, fisheries policy, bioeconomic modeling, aquaculture business economics and aquacultural policy. Current research includes development of training programs for commercial fisheries managers and decision-makers and Project CROOS (Collaborative Research on Oregon Ocean Salmon).

Bryan Tilt, Assistant Professor, Anthropology, OSU: Research interests are environmental anthropology, anthropology of work, rural development, risk assessment and perception, and marine resource management.

Greg Walker, Professor, Speech Communications, OSU: Research interests are in conflict resolution and natural resource management.

b) New Faculty Members

No new faculty are required for the proposed Graduate Certificate.

c) Support Staff

No additional support staff are required for the on-campus component of the proposed Certificate.

Support staff are required for the development of the extended campus component. A Student Assistant will be required for two years for four hours per week. A Research Associate/Program Coordinator will be required for the first two years at a 0.15 FTE.

Admissions and advising will be administered through the College of Oceanography and Atmospheric Science’s Student Programs office. The sponsoring Departments (MRM and FW) will share program development, review and oversight.

Regular reviews of the Program and its impacts on class enrollments and teaching loads for faculty of participating Departments will be conducted, with faculty input.

d) Access to Library and Departmental Resources and Additional Financial Resources Required to Expand Collections

The OSU Libraries maintain a strong fisheries science collection with particular depth in marine fish and fisheries of the Pacific Rim. However, fisheries management information entails more than biology, expanding into socioeconomics, political science, business management, law and cultural studies. The Libraries collect in all these disciplines at varying levels. Fortunately, the resources to support a fisheries management certificate are, for the most part, available in the OSU Libraries' collections. In addition to the strong fisheries science collection, we have solid resources in fisheries economics, history of Pacific fisheries, and U.S. and
Canadian fisheries policy.

Areas of possible concern would be cultural studies and law. The OSU Libraries also provides a digital repository that may be a means to archive and deliver the program's anticipated collection of case studies. This would enhance our collections as well as support the certificate program.

Given the anticipated enrollment for the Graduate Certificate in the Management of Marine Fisheries, the OSU Libraries resources are good and would be excellent with the addition of appropriate legal and cultural material. Delivery systems are in place to address the needs of distance students; however, a thorough review of digital resources needs to be completed to ensure their access to excellent information resources.

E) How Much, If Any, Additional Financial Support will be Required to Bring Access to Such Reference Materials to an Appropriate Level?

Additional funding for library resources is not required to offer the proposed Graduate Certificate. However, a more detail review of the collections, particularly in the law and cultural fields will identify areas for improvement and it is intended that material will be added based on total enrollment and level of interest of enrolled students in particular areas of study.

F) Unique Resources Required

The development of an extended campus component of the proposed Graduate Certificate requires funding to develop and deliver courses. OSU’s Extended Campus has agreed to fund the development of necessary courses and their on-line delivery with a grant of approximately $73,000. This grant is contingent on the proposed Graduate Certificate receiving OUS approval.

OSU Extended Campus will provide support in the development and delivery of the proposed graduate certificate in marine fisheries management as part of its mission to bring OSU Educational programs to statewide, national, and international audiences. Extended Campus will assist in course development, training (initial and on-going), and marketing, at no charge to the program. All courses will be developed within Blackboard using best practices in online learning. The academic unit will retain oversight of the curriculum and instruction and will provide program leadership and advising. Extended campus revenue-share will return 80% of the tuition to the program to cover the cost of ongoing instruction, which is intended to allow the program to be self-sustaining. Students will be provided with support services appropriate to online learners such as online tutoring, phone and email support, searchable knowledge base, and communications to optimize their opportunities for successful completion of the program. Full information is available on the OSU Extended Campus website, http://Ecampus.oregonstate.edu.