



**Tech Prep Articulation Agreement  
Between  
University of Alaska Southeast (UAS)  
and  
Juneau School District (JSD)**

**Fisheries Technology  
School Year 2016-2017**

**Purpose:**

In addition to the general Tech Prep Agreement, the purpose of this articulation agreement is to outline the mutual understanding as we have agreed to the following process and criteria with respect to the program of Fisheries Technology.

**Course:**

The school district program will follow a curriculum coordinated with the administration and faculty of UAS pertaining to the following course:

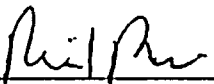
**Fisheries – Alaska Salmon Culture II**

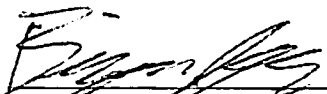
**FT S222** The second course of a two semester sequence which introduces students to the principles, concepts and methods used in the production of Pacific salmon with an emphasis on modern fish culture techniques used by Alaska producers. Methods used to enhance and rehabilitate the five species of Pacific salmon harvested in the commercial, sport and subsistence fisheries of Alaska and Northwestern United States will be covered in detail. Provides students with understanding of regulations and guidelines established by the state of Alaska to administer salmon enhancement programs through private non-profit aquaculture association. **3 Credits (3+0) Prerequisite: FT S122**

Although teaching methods may differ, this course will be subject to the instructional objectives and outcomes of the attached UAS syllabus.

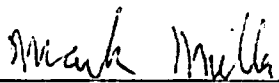
**Administration:**

1. Students must have an overall 2.0 GPA to register for university credit.
2. It is recommended that course work be completed at a level of 3.0 GPA.
3. Students must successfully complete UAS – Alaska Salmon Culture I with a minimum course 2.0 GPA prior to registering for university credit in UAS – Alaska Salmon Culture II.
4. UAS program chairs shall review and approve all course syllabi and related curriculum documents to ensure they replicate the UAS course. This includes standardized course syllabi, course objectives, textbooks, tools, equipment, and methods for evaluation.
5. To receive concurrent credit, the student will register for the Tech Prep course at the beginning of the term in which the competencies will be completed. Registration for yearlong courses will take place during the fall semester.
6. The UAS grade posted will be the UAS grade earned for the course and submitted by the district instructor.
7. Student grades will be submitted by 5:00 p.m. of the final day of the district semester at [uonline.alaska.edu](http://uonline.alaska.edu).
8. Any change in instructor requires suspension of this addendum.

 29/06/16  
 Reid Brewer, Program Head Date  
 Fisheries Technology  
 University of Alaska Southeast

 5/18/2016  
 Ben Carney, Instructor Date  
 Fisheries Technology  
 Juneau School District

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 Dr. Paula Martin, Director Date  
 Sitka Campus  
 University of Alaska Southeast

 5/25/16  
 Mark Miller Date  
 Superintendent  
 Juneau School District

**Finfish Culture II – FT222**  
**Spring Semester 2014**  
**University of Alaska Southeast / Sitka**  
**3 credit lecture**

**Class times/location**

Lecture: Tuesdays, 5 – 7pm

This is a web-based course that students enter through UAS online (Blackboard really). You will need access to a computer and a headset with microphone. We will utilize the Webmeeting function (Elluminate live) which you will find on the left hand tool bar of the homepage of UAS on-line and we will review using this the first night of class.

**Instructor:**

Jim Seeland  
Room 101G, Sitka Campus  
Office phone: 907-747-7742  
Cell ph: 907-738-1190  
Email: [jim.seeland@uas.alaska.edu](mailto:jim.seeland@uas.alaska.edu)

**Office hours:**

Tuesday 3-5pm  
Wednesday 3-5pm  
Contact me to arrange an appt.

**Mailing address:**

1332 Seward Ave.  
Sitka, AK 99835

**Required text(s):**

No textbooks are required for this course. Instructor will provide reference materials through electronic media throughout the course.

**How to Begin:**

1. Read your **Getting Started Packet** (sent by US Mail), return required forms
2. To access the class you will need to set up a UAS user name and password. To do this follow the instructions at: <https://uascentral.uas.alaska.edu/elmo>. Make sure to write down your user name and password for future reference. If you have difficulty with the on-line format, remember that the help desk is available as are several tutorials. Contact the help desk for more information: toll free 1-877-465-6400 or local 796-6400; e-mail: [helpdesk@uas.alaska.edu](mailto:helpdesk@uas.alaska.edu)

**Help Resources :**

**Sitka Campus:** [sitka.distance@uas.alaska.edu](mailto:sitka.distance@uas.alaska.edu), 800-478-6653 or 907-747-7700 (x = phone extension)

- You can start here with questions about *any* aspect of our course, including technology.

If we don't know the answer we will find someone who does

- eLearning Support: Kim x7709, Eric x7757, Emy x7721, Amy x7726, Randy x7701
- Writing Assistant: Jasmine Shaw x7717 [jdshaw@alaska.edu](mailto:jdshaw@alaska.edu)
- UAS Sitka Facebook and Twitter [www.uas.alaska.edu/sitka](http://www.uas.alaska.edu/sitka).

**UAS Technology Help Desk:** 877-465-6400, <http://www.uas.alaska.edu/helpdesk/>

**Course Description:**

Fin Fish Culture II is the second course of a two semester sequence which introduces students to the principles, concepts and methods used in the production of Pacific Salmon with an emphasis on modern fish culture techniques used by Alaskan producers. The course will cover all aspects of fry and smolt production. Topics include water quality, live fish transport, fresh and saltwater rearing techniques, feeding practices, growth, record keeping and fish health management.

**Course Objective:**

After successful completion of the course the student will have acquired the ability to demonstrate the skills necessary to gain entry-level employment in the field of salmonid enhancement to include:

1. An understanding of Pacific salmon enhancement programs in Alaska and the regulatory process that governs them.
2. An understanding of the life histories of Pacific Salmon.
3. A demonstrable knowledge of all aspects of the culture of Pacific Salmon from brood collection to fry rearing.

**UAS Competencies:**

This course will address the following UAS competencies:

**Competency in Critical Thinking:** Students in this class will be required to apply critical thinking skills to understand basic salmon culture techniques and how they are applied.

**Competency in Quantitative Skills:** Students in this class will apply quantitative skills to the culture of Pacific salmon. Examples include measuring and assessing fish growth, determining proper feed types and quantities for various life stages and calculating densities.

**Competency in Professional Behavior:** Students in this class will be required to contact industry professionals from time to time and also interact with their peers in class.

**Competency in Communication:** Students in this class will demonstrate communication skills by participating in class discussions and providing well-written assignments, exams and semester project.

**Lecture Schedule:**

| Topic   | Week  |
|---|---|
| <b>Introduction, syllabus, course overview</b><br><b>Raceways, Troughs and Circular Tanks</b><br><b>Tank &amp; Raceway Design &amp; Operation</b><br><b>Sea Bags</b><br><b>Alarm Systems</b><br><b>Predator Control</b>   | <b>1/14, 21</b>   |
| <b>Growth Measurements &amp; Determining Feed Rates</b><br><b>Feed Conversion</b><br><b>% Body Weight to Feed &amp; Daily Specific Growth Rate</b><br><b>Condition Factor</b><br><b>Growth Projections</b>  | <b>1/28</b>   |
| <b>Sampling Techniques</b><br><b>Enumeration</b><br><b>Weight and Length</b><br><b>Volumetric/Displacement</b>  | <b>2/4</b>  |
| <b>Hatchery Management &amp; Record Keeping</b><br><b>Raceway Loading &amp; Stock Rotation</b><br><b>Bio-Criteria</b><br><b>Rearing Container Management</b><br><b>Daily Hatchery Records</b>   | <b>2/11, 2/18</b><br><br><b>Exam 1 – 2/11</b>   |
| <b>Feeds &amp; Feeding Techniques</b><br><b>Commercially Produced Feeds</b><br><b>Nutrition</b><br><b>Feed Rate Guidelines</b><br><b>Delivery Systems</b>   | <b>2/25</b>   |
| <b>Fish Health Management</b><br><b>Common Diseases and Recognizing Symptoms</b><br><b>Disease Prevention</b><br><b>Disease Treatments, Methods and Calculations</b><br><b>Safe use of Chemicals During Treatment</b><br><b>Equipment Disinfection</b><br><b>Collecting Samples for Pathology</b> | <b>3/4, 11</b>  |
| <b>Live Fish Transport</b><br><b>Air, Vehicle, Boat</b><br><b>Fry, Smolt, Adult</b><br><b>Tank Design</b><br><b>Water Quality</b>   | <b>3/18 – no class,</b><br><b>spring break</b><br><b>3/25 – review</b><br><b>and Exam 2</b> |
| <b>Net Pen Systems</b><br><b>Types of Systems</b><br><b>Anchoring &amp; Maintenance</b><br><b>Predator Control</b>  | <b>4/1</b>  |

|  |   |
|--|---|
| <b>Net Care, Cleaning and Rotation</b>   |   |
| <b>Saltwater Rearing<br/>Smolt Transfers from Fresh to Saltwater<br/>Osmotic Competency<br/>Feeding Frequency<br/>Growth Rates<br/>Common Diseases</b> | <b>4/8</b>  |
| <b>Recirculating Aquaculture Systems</b>   | <b>4/15</b>   |
| <b>Guest speakers throughout the semester will alter syllabus schedule;</b>  | <b>4/22<br/>Exam 3<br/>Finals week<br/>4/28-5/2</b> |
|  |   |

**Grading (see below for details):**

|   |                            |
|---|----------------------------|
| Semester Project                          | 20% - 200 points           |
| Exams (3 @ 100pts)                        | 30% - 300 points           |
| Assignments (10 @ 20pts)                  | 20% - 200 points           |
| <u>Class participation and attendance</u> | <u>30% - 300 points</u>    |
| <b>Semester total</b>                     | <b>100% - 1,000 points</b> |

**Grading Scale:**

|           |           |           |           |                 |
|-----------|-----------|-----------|-----------|-----------------|
| A 93-100% | B+ 87-89% | C+ 77-79% | D+ 67-69% | F less than 60% |
| A- 90-92% | B 83-86%  | C 73-76%  | D 63-66%  |                 |
|           | B- 80-82% | C- 70-72% | D- 60-62% |                 |

**Specific Information and Expectations:**

- **Communication:** the key to any online class is good communication with the instructor. Feel free to contact me anytime, preferably by email but phone contact is fine too. I want to know if you are not going to be able to make it to class for whatever reason and certainly if you are struggling with any of the work and/or concepts in the course.
- **Semester Project:** this is intended to help students understand what goes on in a salmon enhancement facility by detailing key activities throughout the year. This project can be a continuation of the semester project used in FT122. The instructor will work with students who do not have ready access to a facility in order to create a project which meets the objectives for this element of the course.
- **Exams:** cover material presented during the course. Exams do not build upon one another (like a mid-term or final) and are reviewed in class the day they are available. All exams are "take home" in that students have approximately one week from the date of issue to complete the exam and turn it into the course website.
- **Assignments:** these are designed to provide students with additional details on various topics discussed in class. Typically, these require either contacting the facility the student is monitoring for their semester project and/or doing some light research.
- **Class participation/attendance:** I like students to show up for the live/interactive class and provide this as an incentive to do so. Sharing discussion and personal experiences is an important element toward gaining a fuller understanding of the material presented. If a student is present in class he/she will receive credit. Understanding that "life gets in the way" for schooling, all classes are recorded and can be accessed through "Webmeeting Archives" on the website. If a class is missed, participation credit will be given if a 2-3 paragraph summary is provided to the instructor.
- **Gradebook:** students are encouraged to check the Gradebook on a regular basis to assure they are receiving proper credit for their work.

**Technology:**

Expect to face some technology issues as part of getting your work done. Technology problems can be frustrating and time-consuming. Take control. Be a good shepherd of your time and your attitude. A good rule of thumb is to never spend more than about 15 minutes trying to resolve a technology problem on your own. Reach out for help using the numbers on the front page of the syllabus. If it is after hours, switch to a different task until you can

reach technology help. If a deadline is looming, email to let me know of the issue. You will have an automatic extension (as long as it does not become habitual) while you work with technology help to resolve the issue.

Poor Internet access can put you at a disadvantage. Contact me to discuss the possibility of modifying assignments to accommodate connection problems.

**Incomplete Policy:**

Incomplete grades may sometimes be negotiated when circumstances such as illness or family emergency interfere with completion. To qualify for consideration of an incomplete a student must have completed the majority of coursework, earned a C or better and participated fully and consistently though out the class. Incomplete grades will not be given in cases of non-participation or failure to communicate with the instructor. Students who are unable to participate in coursework for a significant amount of time during the semester should plan to re-register for the course at a later date rather than take an incomplete grade.

**The Most Important Study Tip: Aim to Understand Rather Than Memorize:**

There will be many new terms and concepts that you will need to commit to memory. However, you will find the subject much less overwhelming if you focus on understanding the information rather than memorizing it. As we approach each new system, synthesize and build on the information you have previously learned.

**Web Meetings:**

Feel free to interrupt me at any time. Use the "raise your hand" function to be sure I see you. Off-topic chatting is distracting to everyone, so keep text messages on topic. Elluminate sends all messages to the instructor, even if you send only to another student.

**Time and Effort:**

We have only two hours of scheduled meeting time per week. Much of the coursework involves independent study and you should be prepared to work very hard. Assignments, exams and the semester project will be very time-consuming so expect to put in quite a bit of time outside of class. You can always contact me if you are struggling or simply do not understand a question or what is expected of you.

**Important dates:**

|  |                |
|--|----------------|
| 1 <sup>st</sup> day of class   | January 14     |
| Alaska Civil Rights Day  | January 20     |
| Last day to withdraw from the class without a grade and 100% refund: | January 28     |
| Last day to change from credit to audit or vise-versa                | January 28     |
| Spring Break   | March 17-22    |
| Last day to withdraw from class with a "W"                           | April 11       |
| Finals week  | April 28-May 3 |

**GENERAL INFORMATION**

**Disability Services:**

If you experience a disability and would like information about support services, contact the Sitka Campus at 800-478-6653 or DSS at <http://www.uas.alaska.edu/dss/index.html>. It is the student's responsibility to initiate contact and provide appropriate disability documentation to DSS.

**Multi-Lingual Students:**

Taking an advanced course in a language that is not your first language is an accomplishment to be admired. It can also be a challenge. Our writing tutors have ESL expertise and a commitment to helping you reach your goals.

**Prerequisites and Recommendations:**

Finfish Culture I – FT122

**Important:** Reading and writing skills should be of college freshman level or higher. This means you should qualify for placement into English 111. Students with skills below this level usually do not succeed in this course. Reading assignments are complicated and written work is graded on content and clarity. If you are not at this level, contact me to discuss better options. If unsure of your level, I suggest taking the English Placement Test.

**Academic Honesty:**

Academic integrity is expected at all times. It is the student's responsibility to be familiar with the relevant sections in the UAS catalog and the UAS student handbook. Academic dishonesty of any type, including

plagiarism and inappropriate test conduct, will typically result in the most serious consequences provided for by UAS policy. Test misconduct or plagiarism of a written or image-based assignment (including Open Book Tests, Disease Team posts and Labs) will result in a zero for the assignment or a failing grade for the course. Students are required to view the presentation on avoiding plagiarism at our website before starting assignments.