COURSE Information
EDEE 466 Mathematics and Science Practicum/Seminar: Block 2/3 transition
Building E 133
Monday 5:00 – 6:20

INSTRUCTOR       Dr. Richard M. Jones  rmjones7@hawaii.edu

PHONE & OFFICE    (808) 689-2340, Building E 215

OFFICE HOURS      Monday, Tuesday & Wednesday 12:30 - 1:30, Other hours by appointment.

COURSE DESCRIPTION
Block 3 Practicum transition (EDEE 466) is a three-hour field-based experience taken concurrently with Math Methods (EDEE 462) and Science Methods (EDEE 464). The focus is on developmentally appropriate and culturally relevant pedagogy in K – 6th grades. Within this 9-hour block of course work, teacher candidates put into practice standards-based methods and materials that have been studied in their on-campus classes. Teacher candidates complete their practicum experience in a primary grade classroom where they are jointly supervised by the classroom teacher/mentor and the university methods instructor/supervisor.

A minimum of 45 hours are spent in the classroom observing and interacting with children and executing developmentally appropriate lesson plans and activities that reflect current theory and research into the teaching of mathematics and science. Throughout the practicum experience, students will learn to become reflective practitioners, as they evaluate and articulate their experiences through writing and oral discussions.

PREREQUISITES Admission to Professional Teacher Education Component and completion of Block 1 and Block 2
Co-requisite: EDEE 462 Mathematics Methods and EDEE 464 Science Methods.

TEXT(S)
There are no required textbooks for the practicum. Nevertheless, you may wish to begin your professional library and resource collection at this time and therefore may be purchasing a variety of math and science related children’s literature and other appropriate teacher resources available at many local and state bookstores. Your classroom teacher mentor and your university instructor/supervisor will guide you in the selection of books and materials, as needed. Here are a few suggestions to get you started:

Hawaii Content & Performance Standards: http://165.248.30.40/hcpsv3/ select science or mathematics content area, grade levels K through 6 and all strands using drop down menus and print for each grade.

The Common Core in Hawaii: http://wetserver.net/hcpsv3_staging/cc/common-core.jsp

The Next Generation Science Standards: http://www.nextgenscience.org/

Taking Science to School: Learning and Teaching Science in Grades K-8. (http://books.nap.edu/catalog.php?record_id=11625) You may download the PDF of this document or read online.

K-8 Math Resources for the Common Core: http://www.achievethecore.org/math-common-core/k-8-resources/
UHWO TEACHER EDUCATION MISSION STATEMENT

The University of Hawai‘i West O‘ahu Teacher Education program is dedicated to its vision of providing innovative teacher preparation programs and public service activities in support of the continuing development of West O‘ahu communities. To realize this vision, the mission of the program is to provide teacher candidates with the knowledge, skills, and dispositions necessary to become outstanding educators, especially in the elementary schools located in Central and Leeward O‘ahu communities.

UHWO PERSONAL LIABILITY INSURANCE REQUIREMENT STATEMENT

Teacher candidates must obtain and provide evidence of personal liability insurance, prior to participating in any field experience in the UHWO Bachelor of Education (B. Ed) degree program. Proof of insurance will be verified at the start of each academic year. Personal liability insurance must be maintained throughout the early field experience, all practica, and student teaching. Uninsured candidates will not be granted a field placement, therefore delaying timely progress towards program completion.

Teacher candidates are free to purchase personal liability insurance from the vendor of their choice. Insurance may be obtained through the UHWO Education Club, as well as most private insurance companies. Because of its affiliation with the Student National Education Association (SNEA), the UHWO Education Club includes personal liability insurance with membership. To become a member of the UHWO Education Club, an application is available online at: https://sites.google.com/site/uhwosnea/.

UHWO CREDIT HOUR POLICY

For a 3-credit hour course delivered during the normal 15-week semester, a student should normally devote 9-hours of work each week. Of this, 1:20 will be spent in class during the seminar and the remainder will be primarily spent in your practicum setting (45 hours) and the rest will be divided between reading and responding to articles focused on science and mathematics education, completing blog posts, working online, working on presentations, interviewing students, and preparing your signature assignment lesson.

NOTES:

1. Peer evaluation as part of the overall assessment of your practicum experience. An evaluation rubric specific to the peer evaluation of one of your teaching experiences will be provided via the resource folder for this course.
2. **Regular participation in, and completion of practicum and seminar is required.** You are entitled to one (1) excused absence from seminar and practicum. Additional absences (without adequate medical documentation) will result in 7% reduction per absence of your total grade. Attendance is a disposition issue. Professionalism requires that you plan ahead for personal/family occurrences that might upset your schedule. It is important to note that simply telling your mentor or the seminar instructor that you will be absent does not excuse you from this grade reduction.
3. Penalties will be imposed for assigned work, which is submitted late at **7% per day** after the class session. Again, timeliness is a professional disposition.
4. **This syllabus is a living document and the instructor reserves the right to alter, edit, or modify activities and/or assignments based on the learning needs of the individuals in the course.**

COURSE GOALS

01. Become an integral part of the elementary school environment by assisting the practicum mentor (classroom teacher) with the daily routines of classroom life and in the teaching of math and science.
02. Interact with elementary school children (K-6) through formal and informal conversation and discussion.
03. Examine personal assumptions, beliefs and values about the teaching and learning of elementary school mathematics & science
04. Explore, understand, and implement state and national standards for elementary mathematics & science
05. Apply knowledge of content, as well as pedagogical content knowledge, and increase theoretical knowledge and practical experience in the planning, teaching and assessment of mathematics and science in grades K-6
06. Create and implement instructional activities that will improve learning opportunities for all students, regardless of ability, race, gender, ethnicity, and socio-economic status
07. Identify and use a range of resources to support teaching and learning mathematics & science
08. Observe, reflect on and evaluate teaching and learning of mathematics & science in K-6 classrooms
09. Become more confident in your abilities to do and teach mathematics & science
10. Become a reflective practitioner through self-evaluations, peer reviews, mentor teacher and university supervisor observations, and articulation of the practicum experiences conversation, discussion, and written journal reflections
11. Demonstrate professional behaviors and dispositions expected of individuals who have chosen teaching as a profession

COURSE POLICIES:
**Student Conduct:** For information on what is expected of UH-West O‘ahu students, please refer to the Campus Policies sections (pp. 38-39) of the UHWO 2014 – 2015 Catalog: (https://laulima.hawaii.edu/access/content/user/tota/CATALOG/General%20Catalog%202014-15_140418.pdf).

**Accommodations:** Students with disabilities, whether physical, learning, or psychological, who believe that they may need accommodations in this class are encouraged to contact a counselor in Student Services or your instructor as soon as possible to ensure that accommodations can be arranged for you to fully participate in all components of this course. If you question the appropriateness of an accommodation or wish to discuss the nature of a disability directly or exclusively a counselor in Student Services is available to answer any questions and to consult on access, disability and universal design. The instructor strongly encourages you to seek any help that might be needed to support your success.

**COURSE LEARNING OUTCOMES: ASSIGNMENTS/LAB REQUIREMENTS**

**A. Field Experiences: (50%)**

**Required Hours:** The course description states, “A minimum of 45 hours are spent in the classroom observing and interacting with children and executing developmentally appropriate lesson plans and activities that reflect current theory and research into the teaching of mathematics and science.” Note that these hours must be in math and science, and that hours spent observing other disciplines and other school day activities cannot be counted toward the 45-hour minimum. Failure to adhere to this policy could result in receiving no credit for the course.

**Assignments:** All assignments associated with Block 2 Practicum (EDEE 466), are fully integrated into Block 2 courses: Math Methods (EDEE 462) and Science Methods (EDEE 464). Therefore, you will be required to implement instructional experiences designed in EDEE 462 and EDEE 434 as part of the requirements of the Block 2 Practicum. At a minimum, you should be formally observed, assessed, and receive feedback from your mentor teacher on two lessons, a university supervisor on one lesson, and a peer on one lesson.

**B. Weekly Seminar Assignments: (18.75%)**

A weekly seminar will be held on Wednesdays from 5:00 to 6:20. The purpose of the seminar is to help you connect what you learn in your methods classes to what you are experiencing in the field. You will be allowed to miss one seminar with no penalty. Certain dispositions are required of all professionals. Teachers should demonstrate all those attributes of a professional; being prepared, being on time, and being able to collaborate with individuals inside and outside the classroom. 7% for each absence in addition to the one ‘freebie’, 1% for each tardy will be deducted. Please turn off all cell phones prior to entry into the classroom. If there is an emergency in your family and you need to have your cell phone on, please notify the instructor in advance and put your cell on vibrate. Texting, gaming, and/or engaging in online activities not directly related to the class are considered unprofessional and as such have a negative bearing on your grade.

**Weekly Tasks:** Each week, you will be assigned readings and/or tasks for the following week’s seminar, which might include observing, and gathering evidence from the field, and writing about your thoughts and reflections. Depending on the quality of your work, you can receive up to 10 points for completion of each of these tasks.

**C. Signature Assignment: (18.75%)**

As part of your practicum experience you will design and teach an Integrated Science-Math lesson. You should contact your mentor teacher immediately to determine the science and math topics that will work within her/his scope and sequence. The lesson plan format is flexible and may follow the format use previously in Block 1 or the 5E format. This lesson should address both mathematics and science standards as well as include appropriate forms of inquiry that focus on making science and mathematics meaningful and rewarding to students. As part of the lesson, you’ll need to create an activity that can be used as a “hook” to engage students in learning the mathematics and science that is a part of your lesson. For the signature assignment, you’ll be required to complete the following:

1. A post-lesson reflection and revised lesson plan, which incorporate feedback from your university supervisor, your mentor teacher and/or any peers who observed you.
2. Present your engagement activity as part of a Family Math and Science Day, which will be held at the end of the semester.
3. Upload the reflection and the revised lesson plan to Taskstream.

**D. Professionalism: (12.50%)**

Teacher Candidates are expected to be professional at all times during their field-based experiences. Assessment of professionalism is continuous. At any time during the semester, a report of unacceptable professional behaviors by mentor teacher or university supervisor could result in the teacher candidate’s removal from the field experience placement. End-of-
semester evaluations by both mentor teacher and university supervisor rank the teacher candidate’s professionalism benchmarks along the following continuum:

<table>
<thead>
<tr>
<th>Unacceptable</th>
<th>Acceptable</th>
<th>Target</th>
<th>Not Observed</th>
</tr>
</thead>
</table>

*All Teacher Candidates begin their practicum experience with 100 *Professionalism* points. Points will be deducted on an individual basis, based on a negative assessment of the teacher candidate's professional behaviors and dispositions, as reported by one or more of the following professionals: the mentor teacher, school administrator, UHWO field experience coordinator, or university supervisor. For each “unacceptable rating” received on the teacher candidate evaluation form, 5 *points* will be deducted from the teacher candidate’s professionalism point total. Please refer to the standards, benchmarks, course objectives, and responsibilities sections of this syllabus for professionalism expectations.

**GRADING**

<table>
<thead>
<tr>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>50.00</td>
</tr>
<tr>
<td>B.</td>
<td>18.75</td>
</tr>
<tr>
<td>C.</td>
<td>18.75</td>
</tr>
<tr>
<td>D.</td>
<td>12.50</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

The course grade is based on the sum of the scores obtained on the above requirements. *Note that late assignments will not be accepted for full credit.*

**UHWO TEACHER EDUCATION CONCEPTUAL FRAMEWORK**

The Conceptual Framework (CF) serves as a guide to fulfilling the UHWO Teacher Education Program vision of preparing highly qualified teachers for entry into the skilled workforce. The program recognizes the contributions of general education, content area studies, and professional studies to the preparation of educators. Three goals underlie the professional studies philosophy and objectives. Candidates for the Bachelor of Education degree in elementary education are committed to the following:

- delivering high quality instruction that addresses the needs of the whole child
- embracing social justice and equity for all
- becoming reflective practitioners and life-long learners.

**STANDARDS COVERED IN THIS COURSE**

This course meets UHWO ILO 3 Critical Thinking and ILO 4 Disciplinary Knowledge

**HTSB/InTASC Standard 1: Learner Development**

ACEI Standard 1: Development, learning, and motivation  
The effective teacher consistently engages students in appropriate experiences that support their development as independent learners. (A, B, C, D)

**HTSB/InTASC Standard 2: Learning Differences**

AECI Standard 3.2: Adaptation to diverse students  
The effective teacher consistently provides opportunities that are inclusive and adapted to diverse learners. (A, B, C, D)

**HTSB/InTASC Standard 3: Learning Environments**

AECI Standard 3.4: Active engagement in learning  
The effective teacher consistently creates a safe and positive learning environment that encourages social interaction, civic responsibility, active engagement in learning and self-motivation. (A, B, C, D)

**HTSB/InTASC Standard 4: Content Knowledge**

AECI Standard 2.2: Science Content  
The effective teacher consistently demonstrates competency in content area(s) to develop student knowledge and
performance. (A, B, C, D)

HTSB/InTASC Standard 5: Application of Content
HTSB/InTASC Standard 7: Planning of Instruction
AECI Standard 3.1: Integrating and applying knowledge of instruction
The effective teacher consistently plans and implements, meaningful learning experiences for students. (A, B, C, D)

HTSB/InTASC Standard 6: Assessment
AECI Standard 4: Assessment for instruction
The effective teacher consistently applies appropriate assessment strategies to evaluate and ensure the continuous intellectual, social, physical and emotional development of the learner. (A, B, C, D)

HTSB/InTASC Standard 8: Instructional Strategies
AECI Standard 3.3: Development of critical thinking and problems solving
The effective teacher consistently uses a variety of active learning strategies to develop students’ thinking, problem-solving and learning skills. (A, B, C, D)
AECI Standard 3.5: Communication to foster collaboration
The effective teacher consistently enriches communication in the learning environment. (A, B, C, D)

HTSB/InTASC Standard 9: Professional Learning and Ethical Practice
AECI Standard 5.1: Professional growth, reflection, and evaluation
The effective teacher continually evaluates the effects of his or her choices and actions and actively seeks opportunities to grow professionally. (A, B, C, D)

HTSB/InTASC Standard 10: Leadership and Collaboration
AECI Standard 5.2: Collaboration with families, colleagues, and community agencies
The effective teacher establishes and maintains strong working relationships with parents and members of the school community to support student learning. (A, B, C, D)

Effective July 1, 2013: Hawai‘i Teacher Standards Board (HTSB) adopted the Interstate New Teacher Assessment Consortium (InTASC) Model Core Teaching Standards

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. By the end of this course students will be able to demonstrate both content mastery as described within the Hawai‘i Content and Performance Standards for Science and Hawaii Common Core for Mathematics and pedagogical mastery, ILO 4 (Disciplinary Knowledge), DLO 4 (Content Knowledge), DLO 5 (Application of Content), DLO 7 (Planning for Instruction), and DLO 8 (Instructional Strategies)</td>
</tr>
<tr>
<td>2. By the end of this course students will be familiar with key concepts, developments, and reasoning strategies used in mathematics and science teaching such that they are able to successfully develop open-ended, inquiry learning experiences for all elementary students using a variety of materials and instructional strategies and to effectively assess the impact of those experiences on these students, ILO 3 (Critical Thinking), DLO 2 (Learning Differences), DLO 3 (Learning Environments), DLO 6 (Assessment), and DLO 8 (Instructional Strategies)</td>
</tr>
<tr>
<td>3. By the end of this course students will be able to demonstrate professionalism through a variety of course related activities and observed practice of teaching. They will also actively engage with families and the community though the development and presentation of science challenge centers during the Saturday of Science, ILO 3 (Critical Thinking), ILO 4 (Disciplinary Knowledge), DLO 4 (Content Knowledge), DLO 5 (Application of Content), DLO 7 (Planning for Instruction), and DLO 8 (Instructional Strategies) DLO9 (Professional Learning and Ethical Practice), and DLO 10 (Leadership and Collaboration).</td>
</tr>
</tbody>
</table>

TaskStream
To aid in the assessment of our program and provide you with a venue for demonstrating your attainment of the standards and showcasing your work, the UHWO Teacher Preparation Program has adopted an electronic portfolio system that is being implemented in TaskStream (http://www.taskstream.com). TaskStream is a web-based, content manager that allows for assessment management using electronic portfolios. As part of the UHWO Teacher Preparation Program, students are required to maintain an active subscription to Taskstream where they will upload assignments to their UHWO Direct Response Folio (DRF) beginning in their first education course (EDEE 200/201), and ending when they have completed their final education course (EDEE 490/492). DRF is the name given to the specific UHWO Electronic Portfolio. The assignment you submit from each course will be assessed according to the course-specific rubric in TaskStream.
In addition to the course-specific portfolio you will create based on the standards, your TaskStream account will also allow you to create a separate Presentation portfolio that you can share with potential employers or others to whom you wish to showcase your work. Training opportunities for creating such a portfolio will be offered on campus through the Education Club and are frequently offered online through TaskStream. You are encouraged to save electronic or hard copies of all notable assignments or other work you complete for possible inclusion in a presentation portfolio.

**EXTRA CREDIT**

Teaching Children Mathematics Magazine (National Council of Teachers of Mathematics). If you join the National Council of Teachers of Mathematics (NCTM) as a student member and show me either your membership card or the first issue of the magazine that is sent to you I will give you a bonus of 5% on your total grade in this course. (Visit: http://www.nctm.org/membership/content.aspx?id=7618)

**Tentative Schedule EDEE 436 Science Methods**

- **Week 1:** Getting to know you, introduction/course overview?
- **Week 2:** Curriculum and Instruction in Mathematics
- **Week 3:** Curriculum and Instruction in Science
- **Week 4:** Curriculum and Instruction through Integration of Mathematics and Science Part 1
- **Week 5:** Curriculum and Instruction through Integration of Mathematics and Science Part 2
- **Week 6:** Classroom Management in Mathematics and Science
- **Week 7:** Assessing Learning in Mathematics Part 1
- **Week 8:** Assessing Learning in Mathematics Part 2
- **Week 9:** Assessing Learning in Science Part 1
- **Week 10:** Assessing Learning in Science Part 2
- **Week 11:** Using Trade Book in your Mathematics and Science teaching
- **Week 12:** Persuasive Writing in the Mathematics and Science Classroom
- **Week 13:** Continuing your education beyond your BA degree
- **Week 14:** Connecting Home, School and Community
- **Week 15:** Connecting Home, School and Community: Family Mathematics and Science Festival