Course Syllabus

Syllabus: BIO 299/ANR 299/PHY 299: Research Practicum

Course Information

Course Title: Research Practicum
Course Prefix/Number: BIO 299
Semester: Fall, 2020
Class Days/Times: To Be Determined
Credit Hours: 1

Instructor Information

Name: Donald V. Ferree
Phone/Voice Mail: 256-655-1150
E-mail: dferree@tocc.edu
Office location: Online by appointment
Office hours: 9 – 10:30 am M/T/W/TH

Course Description
This practicum course provides science majors the opportunity to examine a specific topic related to the concentration the student is pursuing within the field of science. This work will culminate in the production of a thesis-style research paper or research proposal. Utilization of professional literature, both printed and electronic, will be required during the research process. Completion of this project will incorporate communication skills, knowledge of the process of science and synthesis of scientific knowledge.

**Student Learning Outcomes**

**After completion of the course ...**

1. Students will be able to synthesize information from multiple sources.
2. Students will be able to use scientific vocabulary and concepts appropriately.
3. Students will be able to conduct critical and creative analysis of a problem.

**Course Structure**

Students will work directly with the instructor studying previous research papers and evaluating same. Students will then do literature research on a subject mutually chosen by the student and instructor. The students will then write their own research paper incorporating the concepts learned during their study. The students will be working on their own to the extent possible with guidance and assistance from their instructor.

**Course Learning Materials and Textbook Information**

The instructor will provide the students a research paper to review and evaluate. Then most of the research will be done online or at the library. Having obtained the information needed, the students will write their research paper and work with the instructor to formalize and finalize the paper.
Courses Outline and Important Dates

1. Review of Writing Fundamentals including Proper Citations
2. Research Methodology
   • Scientific Research Proposals
3. Thesis-style Research Papers

The dates by when items need to be completed will be negotiated between students and instructor.

Evaluations and Grading & Assignments:

90 and above is an A
80 - 89 is a B
70 - 79 is a C
60 - 69 is a D
Under 60 is Failing

Your grade will be determined by the following:

GRADE TRACKING SHEET BIO 299 Fall 2020

<table>
<thead>
<tr>
<th>Task</th>
<th>Total</th>
<th>Earned</th>
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</thead>
<tbody>
<tr>
<td>Summary of Assigned Peer Reviewed Article</td>
<td>20</td>
<td></td>
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<tr>
<td>Research Topic</td>
<td>20</td>
<td></td>
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<tr>
<td>Review of Handley Paper using Research Practicum Rubric</td>
<td>20</td>
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<tr>
<td>Task</td>
<td>Points</td>
<td></td>
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<td>-------------------------------------------------</td>
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<tr>
<td>Selection of &amp; Review of Peer-reviewed Article</td>
<td>20</td>
<td></td>
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<tr>
<td>Three references on research topic</td>
<td>20</td>
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<tr>
<td>Research Training</td>
<td>20</td>
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<tr>
<td>Thesis Statement</td>
<td>20</td>
<td></td>
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<tr>
<td>Rough Draft</td>
<td>20</td>
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<tr>
<td>Revisions</td>
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<td></td>
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<tr>
<td>Final Research Paper</td>
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<tr>
<td>Final Research Paper—Mechanics &amp; Grammar</td>
<td>44</td>
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<tr>
<td>Presentation Practice Session &amp; Feedback</td>
<td>16</td>
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<tr>
<td>Final Presentation</td>
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<td>Total</td>
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**Himdag Cultural Component**

Tohono O’odham traditions and cultural beliefs will be discussed as relevant to course topics, and only as appropriate to the Tohono O’odham Nation’s traditional standards for sharing information as determined by the Himdag Committee.

**T-So:son—Our Core**

- T-Wohocudadag – Our Beliefs: We believe that T-Wohocudadag provides balance, strengthens us and helps us respect ourselves, other people, and cultures.
• T-Apedag – Our Well-Being: We believe that T-Apedag is inclusive of what is healthy and good for us (physically, spiritually, emotionally, and mentally), and for all that is around us.
• T-Pi:k Elida – Our Deepest Respect: We believe that T-Pi:k Elida is a deep sense of respect for the land, your surroundings, the people, things upon the land, and also for your own self and your life.
• I-We:mta – Working Together: We believe that I-We:mta is crucial for the success of the College, and includes sharing, working together, and giving back to the community.

Policies and Expectations

Attendance Policy
You are expected to arrive to class on time and be prepared to participate in each class period. Four unexcused absences may result in withdrawal and a “W” or “Y” will be recorded. You may request to be excused from class for religious observances and practices, for illness, for school or work-related travel or for personal or family emergency. If you will be absent, please notify the instructor as soon as possible (approved by Faculty Senate April 2014).

Incomplete Policy
Incomplete (I) grades are not awarded automatically. The student must request an "I" from the instructor who can choose to award an Incomplete only if all three of the following conditions are met:

1. The student must be in compliance with the attendance policy.
2. The student must have unavoidable circumstance that would prohibit the student from completing the course.
3. The student must have completed over 75% of the course requirements with at least a “C” grade.

Incompletes are not a substitute for incomplete work due to frequent absences or poor academic performance. Incomplete grades that are not made up by the end of the ninth week of the following semester will be automatically changed to an F if the agreed upon work, as stipulated on the written form signed by the instructor and the student when the I grade is awarded, is not completed.

Instructor Withdrawals
Students who have missed four consecutive classes (or the equivalent) not submitted any assignments nor taken any quizzes by the 45th day census report, due on [date of 45th day found in Academic Calendar on TOCC website] are assumed NOT to be participating in the class and may be withdrawn at the faculty member’s discretion. [faculty members should be clear in their withdraw policy, if you do not withdraw students please note in appropriate sections].
**Student Withdrawals**

Students may withdraw from class at any time during the first 2/3 of the semester without instructor permission and without incurring any grade penalty. Please be sure to withdraw yourself by [withdrawal deadline date found in Academic Calendar on TOCC website] if you do not expect to complete the class, otherwise you may receive an "F" grade.

**Special Withdrawals (Y) Grade**

The “Y” grade is an administrative withdrawal given at the instructor’s option when no other grade is deemed appropriate. Your instructor must file a form stating the specific rationale for awarding this grade. “Y” grades are discouraged since they often affect students negatively. Your instructor will not award a "Y" grade without a strong reason.

**Equal Access Statement/Disability Accommodations**

Tohono O'odham Community College seeks to provide reasonable accommodations for qualified individuals with disabilities. The College will comply with all applicable regulations, and guidelines with respect to providing reasonable accommodations as required to ensure an equal educational opportunity. This process includes self-identifying as a student with a disability, providing supporting documentation of their disability, and being approved for services through the Disability Resources Office (DRO). It is the student’s responsibility to make known to their instructor(s) the student’s specific needs within the context of each class in order to receive appropriate accommodations. We will work together in order to develop an accommodation plan specifically designed to meet the individual student's requirements.

For more information or to request academic accommodations, please contact: Anthony Osborn, TOCC Disabilities Resource Coordinator, aosborn@tocc.edu, or 520-383-0033 for additional information and assistance.

**Title IX**

Tohono O'odham Community College encourages each student to have the knowledge and skills to be an active bystander who intervenes when anyone is observed or being harassed or endangered by sexual violence. Sexual discrimination and sexual violence can undermine students’ academic success
and quality of life on campus and beyond. We encourage students who have experienced or witnessed any form of sexual misconduct to talk about their experience and seek the support they need.

Confidential support and academic advocacy can be found with: Student Services Title IX Coordinator/Counselor, Alberta Espinoza, M.Ed. located in I-We:mta Ki: Room 18. Phone 520-383-0033 email: aespinoza@tocc.edu

**Conduct: Bias, Bullying, Discrimination and Harassment**

Tohono O’odham Community College faculty and staff are dedicated to creating a safe and supportive campus environment as a core value. Harassment based on age, class, color, culture, disability and ability, ethnicity, gender, gender identity and expression, immigration status, marital status, political ideology, race, religion/spirituality, sex, sexual orientation, and tribal sovereign status will not be tolerated.

**DISCLAIMER:** This syllabus is designed to evolve and change throughout the semester based on class progress and interests. You will be notified of any changes as they occur.

**Online Class:**

In the first class, instructions will be provided about using Zoom and Canvas. Students are encouraged to review the “Student Learning Online” information available at tocc.edu in the top right corner of the home page.

**Course Policies:**

- Students are expected to attend each class., arriving on time, except in the case of an excused emergency.

- Students are expected to contact instructor prior to absences, coming late to class or leaving early.

- Unexcused late arrivals or early departures will count against attendance record.
• Class participation and preparation are essential to student success. Students must read textual material, prepare for projects, complete required research as stated on the course schedule.

• Students are expected to come to class prepared for class and having done any preliminary work required as per the course schedule.

• Students are expected to stay in class and work diligently throughout the whole time. Sleeping, frequent/continued exiting from the class during the class period will constitute one (1) absence.

• No cell phone use is allowed during class. Use of cell phones during class, unless permitted by instructor, is a violation of the T-So:son.

• Late work is marked down 10 points for each day of tardiness.

• Failure to submit a project results in a grade of zero (0). An F is a better grade!

• No work accepted after the last class

Classroom Behavior

• Visitors may be only allowed at class sessions or on field trips with instructor approval, visitor’s safety and behavior are the responsibly of the student.
• Possession of drugs, alcohol or firearms on college property is illegal.
• Food and beverages are allowed in classrooms at discretion of the instructor.
• Cellphones should be turned off during class, unless the instructor is allowing students to use their tools (calculator, internet access).
• Students creating disturbances that interfere with the conduct of the class or the learning of others will be asked to leave.
• Student behavior is also detailed in student handbook under Student Code of Conduct Violations

Make-up policy:
Late assignments that can be made up will be accepted but will be penalized 25%. Laboratories cannot be made up except in the case of college closure. At the instructor’s discretion, extra credit opportunities and optional activities may be provided.

**Academic Integrity:**

Violations of scholastic ethics are considered serious offenses by Tohono O’odham Community College, the Student Services Department, and by your instructor. Students may consult the TOCC Student Handbook sections on student code of conduct, on scholastic ethics and on the grade appeal procedure. Copies are available at Tohono O’odham Community College.

All work done for this class must be your own, or the original work of your group. While you may discuss assignments with other class members, the final written project must clearly be original. You may use work from books and other materials if it is properly cited. Copying from a book without proper reference or from a person under any circumstances will result in an “F” for the assignment, and at the instructor’s discretion, possibly an “F” for the course. If you are uncertain about proper citations ask your instructor or the librarian.

**Course Feedback:**

All assignments will be graded and returned to the students promptly, typically within a week after the assignment is closed for handing in. Email and phone messages will be returned within two days. A student or the instructor may request a student conference at any time during the semester. Quarterly grade reports will be provided to each student, either in person, by email or via the electronic system of Canvas.

The TOCC IT Department has suggested the following guidelines for computer equipment and software that are suitable for online classes at TOCC. Please consult the IT Department with any questions.

**Software capabilities:**

- Ability to run Google Chrome Version 78+
- Updated virus protection, if using PC or Mac. (TOCC recommends the free Windows Defender for Windows machines)
- Security: Must have a password/passcode (login) to access the device. This is responsible computing. Students will be bound by the TOCC IT Policy related to passwords, security, and
appropriate usage.

Is there specific software that needs to be installed?

- TOCC recommends installing the Google Chrome browser as it works well with G Suite. Students collaborate with Google Docs and Microsoft 365 on a regular basis.

Can I use Alternative Browsers?

- Firefox, Internet Explorer, Opera, and other unlisted browsers will not be supported.

Which Operating System should the device run?

The decision for the student’s device is a matter of personal preference, but the device needs to be able to run the Google Chrome, Microsoft Edge, or Apple Safari Browser. Devices can run Windows, Mac OS, or Chrome OS as long as the minimum requirements listed here:

- Operating System:
  - Windows 8.1, 10
  - MacOS 10.11 or Higher
  - Chrome Version 78 or Higher
- Battery life: 5 hours
- Startup time: No longer than 120 seconds
- Wireless: Integrated
- Keyboard: Integrated, but can be wireless
- Audio: Headphone jack with headphones/earbuds
- Microphone: Integrated
- Camera: Integrated
- Processor: 1.6 GHZ or faster 64-bit processor
- Memory: 4 GB RAM or higher
- Disk Space: 16gb GB or higher
- Screen Size: 10 inches or larger
- Monitor Resolution: 1024 x 768
## Course Summary:

<table>
<thead>
<tr>
<th>Date</th>
<th>Details</th>
<th>Due Time</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>📚 Summary of Assigned Peer Reviewed Article (<a href="https://tocc.instructure.com/courses/2128/assignments/20491">https://tocc.instructure.com/courses/2128/assignments/20491</a>)</td>
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