Course Description: An overview of principles of applied behavior analysis, including systematic instructional strategies. This course will prepare candidates for understanding the foundations of instructional and intervention design, with an emphasis on preparing students for educational research activities. Introduction to professional literature search techniques and to professional organizations as a basis for educational inquiry. Explanation of social construction of knowledge, and the philosophical basis of quantitative and qualitative research.

### Course Learning Outcomes

<table>
<thead>
<tr>
<th>Candidates will know, understand, and be able to:</th>
<th>ASSESSMENT</th>
<th>CTC STANDARD</th>
<th>SOE LEARNING OUTCOME</th>
<th>SOE DISPOSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate the ability to write in an academic style and use appropriate formatting (APA)</td>
<td>Writing Assignments (Intro, Methods, Results, Discussion) &amp; Article Evaluation Assignment</td>
<td>PS 2.2, 3.3, 4.2 &amp; M/M 3.1, 3.3</td>
<td>1,2,6</td>
<td>3.1</td>
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<tr>
<td>Demonstrate the ability to read, interpret and synthesize peer-reviewed research articles</td>
<td>Writing Assignment (intro and Discussion) &amp; Article Evaluation Assignment</td>
<td>PS 2.2, 3.3, 4.2 &amp; M/M 3.1, 3.3</td>
<td>1, 6</td>
<td>3.1</td>
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<tr>
<td>Demonstrate the ability to identify independent, dependent and extraneous variables.</td>
<td>AIP Research Project</td>
<td>PS 2.2, 3.3, 4.2 &amp; M/M 3.1, 3.3, 4.1, 4.2, 4.3</td>
<td>1,2,6</td>
<td>1.2, 3.1</td>
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<tr>
<td>Demonstrate an understanding of experimental control.</td>
<td>Article Evaluation Assignment</td>
<td>PS 2.2, 3.3, 4.2 &amp; M/M 3.1, 3.3</td>
<td>1,2,6</td>
<td>1.2, 3.1</td>
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<tr>
<td>Demonstrate the ability to formulate an experimental question.</td>
<td>AIP Research Project &amp; Writing Assignments</td>
<td>PS 2.2, 3.3, 4.2 &amp; M/M 3.1, 3.3</td>
<td>1,2,4,6</td>
<td>1.2, 3.1</td>
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<tr>
<td>Demonstrate the ability to define and distinguish methods for quantifying behavior.</td>
<td>AIP Research Project</td>
<td>PS 2.2, 3.3, 4.2 &amp; M/M 3.1, 3.3</td>
<td>1,2,4,6</td>
<td>1.2, 3.1</td>
</tr>
<tr>
<td>Demonstrate an ability to define and distinguish advantages and disadvantages of various data recording systems.</td>
<td>Article Evaluation Assignment</td>
<td>PS 2.2, 3.3, 4.2 &amp; M/M 3.1, 3.3, 4.1, 4.2, 4.3</td>
<td>1,2,4,6</td>
<td>1.2, 3.1</td>
</tr>
<tr>
<td>Demonstrate an ability to define and distinguish advantages and disadvantages of various single case designs</td>
<td>AIP Research Project &amp; Article Evaluation Assignment</td>
<td>PS 2.2, 3.3, 4.2 &amp; M/M 2.3, 3.1, 3.3</td>
<td>1,2,4,6</td>
<td>1.2, 3.1</td>
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</tbody>
</table>

Note: For each learning outcome, the applicable standard and SOE learning outcome is listed by number (full text provided at the end of syllabus).

**Other select readings, posted as necessary on PolyLearn**

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**TECHNICAL REQUIREMENTS FOR THIS COURSE**

1. Candidates must activate their **Cal Poly email accounts** (i.e. and check their email multiple times per week. Cal Poly mail may be forwarded to a private account. Go to the main Cal Poly Portal page and click on the "Personal Info" tab (upper right hand corner).

2. Candidates must have **access to computers and the Internet** in order to complete requirements for this course. A very recent version of Mozilla Firefox or Google Chrome is highly recommended. You may be required to submit video examples of your research procedures. The School of Education has equipment you can check out in order if needed (see Dr. Wood for more information).

3. Candidates are encouraged to bring **laptops or iPads** to class. If you would like to check out an iPad, talk to Dr. Wood or Dr. Crutchfield.

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**ASSIGNMENTS/EVALUATION CRITERIA**

**General requirements:**

1. Candidates are expected to be prepared, present, and professional. There will be readings, assignments, and podcasts due for most class sessions. Candidates should check Poly Learn regularly for assignment updates and ongoing course information.

**Course Assignments:**

**Revised Manuscript (through Results):** Due week 4 (by Tuesday). You are required to edit your manuscript addressing faculty recommended changes. 50 pts.

**Social Validity Development:** Due week 3 (by Tuesday). Develop a valid and reliable measure of social validity. 25 pts.

**Social Validity Results.** Due week 5 (by Friday). Administer the social validity measure to stakeholders and incorporate the results into your manuscript. 25 pts.
Scientific Poster Development: Due Week 5 (by Tuesday) You will develop a scientific poster based on your EIP and present it at the College of Science and Mathematics Student Research Conference, your poster will be graded independently of your presentation. 50 pts.

Scientific Poster Presentation: Due Week 7 (on Friday) You present your research to attendees at the research conference faculty members will visit your poster with a rubric and complete the scoring materials. 25 pts.

Discussion Section (Due by Week 8): You will develop a draft of your discussion section, that will serve as the final section of your manuscript. 50 pts

Contribution to EIP Clearinghouse (Due by Finals Week): Each group will contribute a content acquisition podcast and materials (data collection sheet, IV materials, etc.) to the Cal Poly SPED Google Site as a way of disseminating research back to key stakeholders. 75 points

Final Paper (Due Finals Week): You will submit your final edited manuscript as the culmination of your research strand. 50 pts

Course Total: 350 pts

GRADING

A  Superior attainment of course objectives (94-100%);
A-  90-93%
B  Good attainment of course objectives 84-89%
B-  80-83%
C  Acceptable attainment of course objectives 74-79%
C-  70-73%
D  Poor attainment of course objectives(64-69%
D-  60-63%
F  Non-attainment of course objectives (<60%)

"Plus" and "Minus" grades will be assigned. A grade of Incomplete (I) will be issued by the instructor only under the most extreme circumstances.

GENERAL GUIDELINES

Comment [VM2]: EDUC 590 is the final course in the EDUC Research Series. In this course, students culminate their Action Research findings. Students must thoughtfully reflect on their learning about teaching strategies and evidence based practices. They will think about how to evaluate and select evidence based practices and teaching methods for learners with varying abilities (PS 2.2, 3.3, 4.2 and M/M 3.1, 3.3). Students will also think about how to use a variety of techniques and processes appropriate to the diverse needs of individual students (M/M 2.3), and will continue to implement and adjust their teaching methods when students are not responding to certain strategies or learning environments (M/M 3.4, 4.1, 4.2). Through culminating presentations, this course also involves partnerships with families and the Clinical Practice school site and includes communication to various partners (M/M 3.5, 4.3)
PLEASE READ THESE GUIDELINES CAREFULLY.

1. All assignments submitted to the instructor must be the original work of the candidate and shall not have been submitted for credit in any other course. Unless otherwise indicated by the instructor, all assignments are to be completed by individual candidates, do not share, copy or plagiarize other candidate’s work. Collaboration in the form of discussion and input from others, however, is highly encouraged.

2. All assignments must be completed and presented to the instructor on or before the due dates. If assignments are submitted late, students will be eligible to earn up to 50% of the original value of the assignment if turned in within one week of the original due date (by the start of the next week’s class). Note that this means that anything turned in after the start of class the day an assignment is due will receive, at a maximum, 50% of the original grade. It is highly encouraged that you work on course assignments ahead of time; please do not wait until the last minute to complete assignments.

3. Unless specifically directed otherwise, all written assignments must be completed using Microsoft Word and APA guidelines. Instructors will specify if assignments are submitted as hard copies or electronically.

4. Before submitting any assignments, reread your work to ensure that it reflects the professional quality expected of a teacher. Please do not rely on the Spellcheck function of your computer. Employ good sentence structure and grammar and correct all typing/spelling errors. As teachers, you are models for pupils. Therefore, you are expected to model appropriate oral and written language in this class.

5. Although many people need to drive sizeable distances to Cal Poly, please arrange to be on-time. Class will start promptly.

6. It is University policy to provide, on a flexible and individual basis, reasonable accommodations to candidates who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Candidates with disabilities are encouraged to contact their instructor to discuss their individual needs for accommodations.
The School of Education develops and supports qualified, competent, and caring education professionals who prepare a diverse student population to become active and thoughtful participants in a democratic society.

The School of Education leads the campus in an all-university approach to preparing education professionals. These professionals create, assess, and modify environments, practices, and policies to foster the achievement of each and every learner; they strive for equity in schools and society; and they are committed to inquiry and professional growth for themselves and the advancement of P-20 education. School of Education faculty models leadership in its teaching, scholarship, and service through a grounded, reflective, learn-by-doing approach and through sustained collaborations with its education partners: P-12 schools, families, community colleges, universities, and local, state, and national agencies.

**LEARNING OUTCOMES**

1. **Be qualified, competent, and caring professional educators**: Demonstrate subject mastery, pedagogical and professional knowledge, and dispositions toward ethical practice that shape change as well as promote educational equity and equal access to learning for all students.
2. **Integrate principles and practices of professional fields to support student learning**: Demonstrate the ability to translate theory into practice and utilize knowledge-building technologies to foster learning, mentoring, and leadership.
3. **Engage in cross-disciplinary and collaborative practices**: Understand the relationships of one discipline to another within their particular profession, and demonstrate the ability to establish collaborations and partnerships to enhance professional practices and support student success.
4. **Demonstrate authentic assessments designed for student success, individual growth, and program improvement**: Develop and use assessments that are data-driven, involve multiple sources and opportunities, are linked to professional standards; and are used to modify programs and practices.
5. **Effect sustainable communities in a multicultural environment**: Assume leadership roles in schools, communities and their professional associations to shape change, ensure tolerance and inclusion, and advance principles of social justice; promote comprehensive schooling to support education equity and access to college and career preparation.
6. **Engage in professional practices**: Demonstrate reflective practice, uphold professional standards, and enact dispositions for both personal growth and advancement of the education field; initiate the practice of life-long learning by engaging in professional associations and establishing personal professional growth plans.

**SOE DISPOSITIONS**

**Professionalism**

1.1 **Responsibility and Accountability** — Acts ethically, responsibly, and with integrity, and is considerate, respectful, punctual, and appropriate in appearance, in conduct, and in all interactions with students, families, mentors, and colleagues. Is creative and self-reliant in finding solutions to problems and managing dilemmas. Is open to constructive feedback from others, manages situations of conflict and their own stress appropriately, and takes responsibility for own actions.

1.2 **Creating Positive Climate** — Develops curricula and programs that provide equitable access to learning opportunities for each and every student and educator through both content and processes. Promotes a climate in which learning is valued and on-going. Provides choices to enable all to share in and contribute to social and intellectual life. Upholds fair and equitable standards for conduct that encourage responsibility, mutual respect, and civic values, and that safeguard the physical, intellectual, and emotional well-being of each and every student and education professional.

**Ethical Practice**

2.1 **Cross-Cultural Competence** — Promotes respect for self, students, families, and cultures. Demonstrates belief that everyone can learn and values human diversity and equity in the learning environment. Examines own biases and prejudices and develops necessary awareness, aptitudes, knowledge, and skills for effectively and respectfully teaching and mentoring people whose culture differs from their own.

2.2 **Collaboration** — Actively engages in a community of learners that develops relationships, programs, and projects with colleagues in P-20 schools and educational agencies designed to improve the quality of education for each and every student and education professional. Contributes professionally to the field at local, regional, state, and national levels.

**Shaping Change**

3.1 **Inquiry and Innovation** — Is prepared to engage in and fosters in others life-long learning, continuous reflection, and research (on own practice or beyond). Creates learning opportunities for self and others. Maintains currency with professional knowledge, effective and ethical practices, and scholarship in the field. Tries new methods and tools. Incorporates knowledge-building technologies; critical, creative, and metacognitive thinking; conceptual understanding; independent and interdependent problem solving; and experiential approaches to learning.

3.2 **Social Justice** — Seeks to understand own privileges and prejudices, the stereotypes embedded in educational materials, and the cultural bias institutionalized in schools and other education-related organizations. Works toward realizing a nation and world where all have basic human rights and actively seeks to eliminate social, political, and economic inequities. Promotes social and environmental responsibility. Independently and collaboratively identifies opportunities, goals, and avenues for social and organizational development toward excellence and equity. Empowers others to achieve organizational and personal goals.

**SCHOOL OF EDUCATION: STANDARDS FOR EDUCATION SPECIALIST MILD/MODERATE DISABILITIES CREDENTIAL**

Program Standard 2: Professional, Legal, and Ethical Practices
Program Standard 4: Effective Communication and Collaborative Partnerships
Program Standard 5: Assessment of Students
Program Standard 11: Typical and Atypical Development
Program Standard 12: Behavioral, Social and Environmental Supports for Learning
Program Standard 14: Creating Healthy Learning Environments

Wood, Crutchfield EDUC 590/ Spring 2017
Program Standard 16: Assessment of Candidate Performance

Mild/Moderate 1: Characteristics of Students with Mild/Moderate Disabilities
Mild/Moderate Standard 2: Assessment Evaluation of Students with Mild/Moderate Disabilities
Mild Moderate Standard 4: Positive Behavioral Support
Mild Moderate Standard 5: Specific Instructional Strategies for Students with Mild/Moderate Disabilities

1. University Learning Objectives (ULO) supported by the course.

- Think critically and creatively.
- Communicate effectively.
- Work productively as individuals and in groups.
- Use their knowledge and skill to make a positive contribution to society.
- Make reasoned decisions based on understanding of ethics, a respect for diversity, and an awareness of issues related to sustainability.
- Engage in lifelong learning.