Academic Affairs Committee

Form 1: Presentation Checklist

Two New ED Certificates

Name: Nick Recktenwald **Date**: 10/18/23

Department: Assessment and Curriculum

COCC Contact Information: nrecktenwald@cocc.edu

Use the instructions for this document to complete your presentation checklist; then e-mail your completed presentation checklist (*not* the instructions) to the Academic Affairs chair by his or her specified deadline. **Please note:** If an item listed is not relevant to your specific presentation to Academic Affairs, please mark as **N/A**. Use as many pages as necessary.

PROPOSAL OVERVIEW

Faculty from Education have proposed two new short-term certificates: Foundations for Education Licensure (Angie Cole) and STEM in Early Childhood Education (Amy Howell). The concepts for these programs were approved by the appropriate instructional dean (Jessica Giglio) and the VPAA. They are ready for Academic Affairs review before moving to Curriculum Committee.

TYPE OF AGENDA ITEM

- ☐ Information Item (requires approval of AA Chair)
- ☐ Action Item
  - ☐ Information and committee feedback
  - ☐ Procedure—revision (Attach current procedure with proposed changes illustrated with track changes)
  - ☐ Procedure—new
    Identify suggested location in *GPM*: _____
  - ☐ Policy—revision (Attach current policy with proposed changes illustrated with track changes)
  - ☐ Policy—new
    Identify suggested location in *GPM*:_____
  - ■ New academic program (Complete only items #1 and #2 on this form and attach stage 2 document.)
  - ☐ Other:_____

BUDGET

Both of these programs will use existing courses and the Foundations for Licensure certificate anticipates no budgetary impact to implement. STEM in ECE anticipates needing $500 for materials in its first year of implementation, but no other funds requested/reallocated.

INSTRUCTIONAL REQUIREMENTS

Detailed in Program Proposal, but no new courses or faculty hiring requested for either program.

OPERATIONAL NEEDS, CURRENT AND FUTURE

Detailed in Program Proposal

STUDENT IMPACT

Detailed in Program Proposal

ANTICIPATED IMPLEMENTATION TIMELINE

Targeting the AY 24-25 Catalog.

Program Proposal: STEM in Early Learning

After VPAA approval of the program concept, faculty proposers must fill out this form for submission to Academic Affairs Committee review in Fall term. The Office of Assessment and Curriculum is available to consult and support faculty throughout the program development and approval process.

Table of Contents

Accreditation

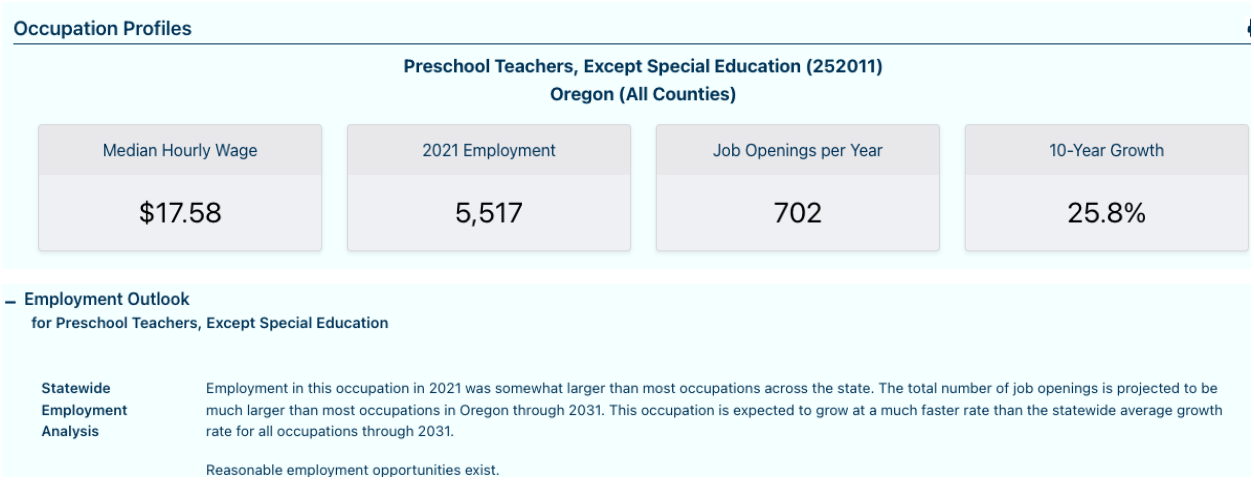
Is there an accreditation association that aligns with the program? If yes, answer the following:

1. What is the name of the accrediting body or bodies? No, this program is not associated with an accreditation.
2. Will this program seek accreditation? If yes, what is the cost (budget and time) to seek accreditation? No, this program will not seek accreditation.

Evidence of Need (Standard A)

Submit a Occupational Profile Report as a PDF from Oregon's Employment Department website, qualityinfo.org for the relevant career entry point for your program (See "Standard A" in the Appendix below for more information). The Director of Assessment and Curriculum can assist with generating the correct report if you need assistance. If there is additional evidence of need that you'd like to share here for program approvers, please do so, but do not replicate information that is contained in the Occupational Profile Report.

Based on data from Oregon's Employment Department (qualityinfo.org), this proposal helps to meet the rising needs for the early learning workforce. For the Occupational Profile Report, please follow this link.



Occupation Profiles

Preschool Teachers, Except Special Education (252011)
Oregon (All Counties)

Median Hourly Wage	2021 Employment	Job Openings per Year	10-Year Growth
$17.58	5,517	702	25.8%

– Employment Outlook
for Preschool Teachers, Except Special Education

Statewide Employment Analysis

Employment in this occupation in 2021 was somewhat larger than most occupations across the state. The total number of job openings is projected to be much larger than most occupations in Oregon through 2031. This occupation is expected to grow at a much faster rate than the statewide average growth rate for all occupations through 2031.

Reasonable employment opportunities exist.

Advisory Board Collaboration (Standard B)

Please provide the names of your advisory board members, as well as the organizations they represent:

Advisory Board

The ECE program has extensive partnerships with programs and organizations throughout our region. Leaders from programs serving youth and families comprise our advisory board membership.

Current advisory members include representatives from Head Start, Child Care Resources and Referral, private preschool programs, High Desert Education Service District, Redmond School District, Bend La Pine School District, Mountain Star Family Relief Nursery, Better Together, Healthy Beginnings, Bend Parks and Recreation, the Central Oregon STEM Hub, and the Central Oregon Early Learning Hub.
Through regular conversations and interactions, the ECE faculty seek advisory members' perspectives and guidance about potential curriculum needs and professional development gaps that COCC's ECE program may be able to address.

The early learning network in Central Oregon is diverse and highly engaged. Through regular monthly meetings related to different boards, programs, and policy work, members from our advisory group are in regular contact with COCC's ECE faculty and with one another. The recommendations and guidance from our advisory members have been influential in all our most recent program and curricular revisions.
With respect to a certificate to support rising educators in Early STEM, we have current partnerships with the Early Learning Hub and the STEM Hub specifically centered on STEM in Early Learning. These two organizations helped to shape our ED 114: Mathematics for Early Learning Educators, Week of the Young Child, and the Family STEM night events.

An additional source of guidance for this certificate comes from the Oregon Center for Career Development, which "provides leadership in the development and operation of integrated and statewide professional development standards and systems." In recent consultation with the OCCD's director, Sarah Myers and Oregon Registry Coordinator, Heather Erwin, regarding our current degree and certificate offerings, I asked OCCD leadership about the need for STEM-centered training for our early learning workforce. The response was clear: Oregon's early learning educators need training and preparation to provide a STEM-centered learning for young children and families.

Current Advisory Board members for Early Childhood Education Programs at COCC

Name/Title	Organization	Email

Karen Prow	NeighborImpact-Child Care Resources	karenp@neighborimpact.org
Kim Brown	NeighborImpact-Head Start	Kimb@neighborimpact.org
Brenda Comini	Central Oregon Early Learning Hub	brenda.comini@hdesd.org
Tracy Willson-Scott	Central Oregon STEM Hub	tracy.willson-scott@hdesd.org
Julie Mitchell	Madras High School	jmitchell@509j.net
Kara Tachikawa	Mountain Star Family Relief Nursery	karat@mtstar.org
Amy McCormack	High Desert Education Service District	amy.mccormack@hdesd.org
Heather Rogen	Boulden Rogen Early Childhood Academy	Heather.Breca@gmail.com
Teresa Martin	The Children's Learning Center	teresam@madrastclc.org
Bess Goggins	Boys and Girls Club of Bend	bess@bgcbend.org
Sidney Traen	Oregon Dept. of Education-Division of Early Learning and Care	sidney.traen@ode.oregon.gov
Amy Luhn	Oregon State University-Family Resource Center, Corvallis	amy.luhn@oregonstate.edu

Provide advisory board letter of support and confirmation of program need. This should be a short letter of support with all advisory board members as signatories. If the advisory board has not yet been convened, please list all stakeholders that participated in program conception and development. **Note: the final advisory board list and letter of support must be provided before the program will be approved by Academic Affairs.**

All members of the advisory group have signed a letter of support (see Appendix) for this proposal.

Amy Luhn (Jun 2, 2023 09:56 PDT)	Family Resource Center, Oregon State University
Karen Prow (Jun 6, 2023 15:56 PDT)	NeighborImpact Child Care Resources
Kimberly Brown (May 30, 2023 16:02 PDT)	NeighborImpact Early Head Start/Head Start
	Early Learning Hub of Central Oregon/HDESD
	Madras High School/509j
	MountainStar Family Relief Nursery
	High Desert ESD
Heather Rogen (May 30, 2023 15:52 PDT)	Boulden Rogen ECA
	The Children's Learning Center
Dana Sidney Rogen (May 30, 2023 15:55 PDT)	Oregon Early Learning Division
Bess Goggins (Jun 2, 2023 08:20 EDT)	Boys & Girls Clubs of Bend
	Central Oregon STEM Hub

Alignment (Standard C)

College Mission

Describe specifically how this proposal aligns with the College's mission.

This proposal aligns with COCC's mission to promote student success through educational opportunities that prepare our students for the changing needs of the early learning workforce. This proposal aligns with the College's commitment to relying on trusted, regional partnerships to support a vibrant community that is well prepared, confident, and eager to contribute to our regional goals for equity, access, and personal and professional engagement.

Strategic

How does this program fit into important educational and/or workforce needs of the College, of the Central Oregon region, and of Oregon as a whole? Identify specific alignments between your proposed program and these needs. Potential sources of evidence to meet this approval standard (not an exhaustive list):

- COCC Strategic Plan
- State priorities (HECC/CCWD)
- Workforce initiatives
- Long-term grants and funding initiatives
- National workforce or educational initiatives
- Articulation agreements with local high schools, colleges, and/or universities.

Central Oregon has a long-standing partnership with two leading organizations in the community: The Early Learning Hub and the STEM Hub of Central Oregon. Over the past few years, COCC has partnered with both hubs to assess the needs of early learning educators with respect to increasing opportunities for young children to engage in STEM (Science, Technology, Engineering, and Mathematics)-related activities. Through this work

and dedicated partnership, a priority has surfaced, which centers on early learning educators' sense of identity and competency in the STEM areas. To address this gap, COCC has taken several steps.

We have partnered with the STEM Hub and the Mathematics department to design and implement a computation course (ED 114) that is rooted in early learning and the mathematics that underlie much of children's active exploration. Additionally, the Hubs and COCC have a regionally focused partnership during the national Week of the Young Child, an annual event recognized by the National Association for the Education of Young Children (NAEYC) to support families and educators as they create and facilitate activities that are rooted in developmentally appropriate practice and center on STEM mindsets. For the past two years, the Program Director of the Early Childhood Education program has designed curriculum for each of the STEM areas and has partnered with the STEM and Early Learning Hubs to organize Family STEM kits for over 2200 children throughout Central Oregon. The hubs and COCC have an additional partnership with an annual Family STEM night, which is hosted at COCC in the Barber Library. The STEM Hub has helped to fund this event, which brings children and families to COCC for support and encouragement in developmentally appropriate STEM-based activities.

An additional example of the partnerships between COCC and regional and statewide agencies centered on early learning and STEM is the form of Library material acquisition Over the past few years, we have had the financial support through grants, community support, including financial support from both hubs, and private funding to dedicate part of the Children's Literature & Equity Resource Center (CLERC) toward STEM-related learning. In short, COCC has become a well-respected partner in the development of STEM-related mindsets for adults caring for and educating young children. We aim to formalize this focus through the development of a one-year certificate that allows early learning educators to demonstrate their commitment and competency in the STEM areas as they relate to young children's (birth through grade 5) early care and education.
As COCC begins a new stage of development within the Early Childhood Education program as part of the Madras Expansion, a commitment to educator competency in the STEM areas and early STEM and family literacy are key areas identified with our regional workforce partners, including the High Desert Education Service District's (HDESD) Early Intervention (EI) and Early Childhood Special Education (ECSE), the Children's Learning Center (TCLC), and the Jefferson County School District (509J) as high need and high impact areas of opportunity for their broader community and K-12 education goals. To prepare a highly qualified workforce to this end, we see a need for preparation through a formalized program, such as a certificate option. We believe a formalized set of courses that center on the underlying concepts and mindsets in the STEM areas, a solid understanding of young children's learning and developmental needs, and the pedagogical content knowledge necessary to engage young children and their families in STEM will provide a meaningful and necessary pathway for rising early learning educators.

This certificate will address the knowledge, skills, and confidence of a rising early learning workforce. The certificate will include coursework in Early Childhood Education courses, including ED 174: Math, Science, Technology in Early Learning; ED 235: Teaching and Learning in a Digital Age, and ED 114: Mathematics for Early Learning Educators as well as courses in natural and earth sciences and mathematics. Our underlying goal is for rising leaders in early learning to grow in their confidence, professionalism, and commitment to STEM as a key aspect of children's learning and development.

The certificate of completion will be a stackable component with the Associate of Applied Science (AAS) in Early Childhood Education as well as the Associate Arts Oregon Transfer Degree. This certificate will help to delineate a focus area on hands-on exploration and discovery. The degree will include a set of courses within Early Childhood Education and field placement experiences in early learning settings throughout Central Oregon. Field placement partnerships will include private and public preschool programs as well as therapeutic preschool programs, before and after school programs, and primary elementary classrooms.
The Early Childhood STEM Certificate is a three-term program with 37-38 credits.
This certificate will directly support students who are interested in entering the workforce now in the capacity of a

- Early Care and Education Director
- Early Childhood Lead Teacher
- Early Childhood Assistant Teacher
- Early Childhood Substitute Teacher
- Elementary Classroom Instructional Aid/Educational Assistant
- Early Intervention and Early Childhood Special Education Substitute or Assistant teacher

Across all these positions, these are early learning professionals who work to improve the lives of children and families by providing high quality care and education to children between the ages of infancy through the primary elementary classroom years (K-3).

Catalog Description(s) (Standard D)

Provide a catalog description for each award proposed. New program proposals require a catalog description that explains the award's purpose and transfer or employment goals; the description should address the implicit student question, "why should I enroll in this program?". Descriptions have a 1500 character maximum and are limited to one or two paragraphs. They should help students differentiate between similar programs (if applicable) and should not be identical for multiple programs in a discipline. Do not include information about admissions, program requirements, prerequisites, or format.

The STEM in Early Learning 1-year Certificate of Completion provides early learning educators with the initial content, skills, and dispositions to support young children's engagement in Science, Technology, Engineering, and Mathematics (STEM) through developmentally

appropriate culturally responsive practices. Required coursework will address the content and pedagogical considerations for supporting young children about the foundations for STEM-related focus areas. This certificate prepares current and future early learning educators for employment opportunities that include classroom teaching, family advocacy and engagement, before/after school programming, and early learning curriculum design. Courses required for the STEM in Early Learning align with requirements for the AAS in Early Childhood Education, and students may complete the STEM in Early Learning Certificate while working toward the AAS and/or other certificates in ECE.

Design (Standard D)

Program Learning Outcomes

For each award proposed, provide a maximum of eight program learning outcomes in a numbered list. Please see tips on this intranet page. The Director of Assessment and Curriculum is available to assist with the development of observable learning outcomes (and keep in mind that all CTE programs are required to assess student learning in the context of their approved program-level outcomes).

1. Examine current research on the role of science, technology, engineering, and mathematics (STEM) as interrelated to children's development and learning in the early years (birth-age 8);
2. Apply knowledge of child development and developmentally appropriate and culturally responsive practices to learning environments and conditions that support children's active engagement in STEM activities;
3. Identify the equity gaps in STEM with respect to child and family demographics (including ability, race, language, SES) and
4. Demonstrate critical awareness of how research and evidence-based practices can address inequities;
5. Practice developmentally appropriate practices to engage children, educators, and families in STEM activities;
6. Identify areas of professional development to grow as an early learning educator.

Core Courses

Foundational Requirements / Related Instruction:

- **Computation: ED 114 (4)**
- **Communication: WR 121 (4)**
- **Human Relations: ED 219 (3) or ED 224 (4)**

ED 140: Introduction to Early Childhood Education	**4**
ED 150: Environments and Curriculum in ECE	**4**
ED 114: Mathematics for Early Learning Educators	**4**
ED 240: Purposeful Learning and Active Exploration through Play	**4**
ED 174: Math, Science, and Technology in Early Learning	**3**

ED 235: Teaching and Learning in a Digital Age	3
2 Courses from Lab Sciences	8
WR 121Z	4
ED 219 or ED 224	3-4
TOTAL	**37-38**

List any new courses that will need approval to bring the program online:

We do not see a need, at this time, for additional courses for this program.

Effective Year and Term (Standard D)

Practice is that new programs are effective the fall following approval. If a different year and term are desired, identify those here and provide a rationale.

Our goal is for this new program to be available starting Fall 2024.

Enrollment Options (Standard D)

The oversight of this program falls within the current formula for the Program Director's annual non-instructional load release. Workload and load calculations are reviewed annually with the Instructional Dean who supports Social Science and Early Childhood Education.

Budget (Standard E)

Expenses

Use the table below to identify current resources to be directed to the program and new resources needed. Ongoing expenses should be included in each year to display cumulative expenses. For guidance, contact the chair and/or dean.

For the first year of implementation (2024-2025), an additional $500 is requested in order to purchase additional materials that are specific to STEM areas. These materials will be a part of our classroom collection and may be used in subsequent years. The program director will continue to seek outside funding from grants and programs to maintain career-centered materials and tools to support students' professional and academic development.

EXPENSE	**First Year** *Reallocation*	**First Year** *New*	**Second Year** *Reallocation*	**Second Year** *New*	**Third Year** *Reallocation*	**Third Year** *New*
Personnel	0	0	0	0	0	0
Equipment	0	0	0	0	0	0
Hardware	0	0	0	0	0	0
Software	0	0	0	0	0	0
Materials	0	500	0	0	0	0
Curriculum	0	0	0	0	0	0
Other capital	0	0	0	0	0	0
Accreditation	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total	0	500	0	0	0	0

Revenue

Identify new course/program fees. Identify other dedicated external resources (grants, outside funding).

At this time, this program will not require additional course/program fees. The program director will continue to work with outside funding, such as the Roundhouse Foundation, and other grants to provide resources, such as learning materials, that relate to STEM.

Student Aid

Identify special aid, scholarships, or other student resources. Email Financial Aid if you need assistance filling out this portion of the form.

This program falls within the Early Childhood Education program, as students in this program have access to the Partners in Practice grant program as well as statewide scholarships from the John and Betty Gray Scholarship and the professional development opportunities through the Oregon Center for Career Development at PSU.

Internal Impacts (Standard E)

Identify impacts to the following areas. If none, write "none." If you are unsure, the Director of Assessment and Curriculum can connect you to the appropriate person in the relevant unit to help faculty proposers understand potential impacts.

Admissions and Records: This program will be a new program within GradTracks, and as such, we will need to make sure our current CPC/CPL agreements are identified.

Advising: Similar to our other certificates, the STEM in Early Learning cert. will be wholly contained within the AAS in ECE. As such, advisors will need to be aware of the stackable certificates, including STEM in Early Learning, that are available to our students who are seeking the AAS degree, or for those who are starting with the STEM in Early Learning and looking toward the AAS. Our current practice is to meet with CAP Services advisors annually to review all of the Early Childhood/Education programs and advising practices. We will continue this should this program be approved.

Bookstore: Currently, we have a robust and collaborative partnership with the Bookstore, particularly related to our grant-related purchases. If STEM in Early Learning is approved, we will continue to provide timely requests to the bookstore for the needs of the program and required courses.

Campus Services: Aside from the annual Family STEM Night, which is in partnership with the Barber Library and community organizations (e.g., Deschutes Public Library, Juntos Aprendemos, STEM Hub), we do not foresee additional impacts to Campus Services.

College Now: Currently, we articulate several Early Childhood/Education courses with our regional high school programs. At this time, we do not see additional impacts to our College Now program. We will continue to work with regional partners, such as the High Desert ESD and the Perkins grant program, to recommend materials and resources to our high school colleagues.

College Relations: If this program is approved, we will work with College Relations to create promotional and informational materials. We will also work with MPR to update our web pages in Early Childhood/Education, which are presented in English and Spanish.

Financial Aid: The STEM in Early Learning certificate is eligible for financial aid.

Information Technology Services: At this time, we do not foresee additional impacts with ITS.

Library: For the past few years, we have partnered with the Central Oregon STEM Hub to identify and purchase materials, including books, for the Children's Literature & Equity Resource Center. If this program is approved, we will likely see an increase in the loans requested, and it is possible we will request additional or duplicate materials. We will continue to maintain a close working relationship with Barber Library staff and leadership to make sure we are not placing unreasonable strain on existing resources.

Policy: No foreseeable impact with respect to policy

Risk Management: No foreseeable impact with respect to risk management

Tutoring and Testing: No foreseeable impact with respect to tutoring and testing

Is current faculty staffing adequate to meet (a) the likely enrollment needs of the program and (b) the content knowledge requirements to teach the curriculum?

Yes, the current faculty staffing in ECE and COCC will meet the enrollment needs of this program.

If no, please explain the personnel needs:

External Impacts (Standard E)

Are adequate internship, work-based learning experience and/or Cooperative Work Experience sites available? Please list current or potential sites (or write "none" if not applicable):

Yes. We will continue to use our current work-based learning experience environments for internships and field placement, and we will look to extend our placement opportunities for students to apply STEM-specific mindsets. Current sites include Head Start, Early Head Start, Mountain Star Family Relief Nursery, Boulden Rogen Early Childhood Academy, The Children's Learning Center, and Growing Tree. Additional sites may include settings, such as the High Desert Museum, the Central Oregon STEM Hub, and before/after school programs that incorporate STEM-centered learning.

Appendix A

For reference, HECC/CCWD review program proposals against the five standards below. If the proposed program cannot show evidence of how it will align with these standards, the program will not be approved by HECC/CCWD (and should not be approved by Academic Affairs). The information collected in this form should show how the proposed program meets each of theses standards:

Standard A: Need: The community college provides clear evidence of the need for the program.

This standard can be met by attaching the Occupational Profile Report for the career associated with the proposed program, which per HECC/CCWD, must be generated from the State of Oregon's Employment Department website, https://www.qualityinfo.org/

In some cases, an Occupational Profile Report will either not exist for a particular career (or will not exist with data pertinent to the Central Oregon region), or will generate a report that covers multiple career paths with divergent educational requirements (i.e., EMTs and Paramedics will be grouped under the same report despite differences in training and education requirements). In those cases, a Supplementary Occupation Profiles form can be attached along with the Occupational Profile form generated from Oregon's Employment Department. The Director of Assessment and Curriculum can provide the supplemental form if you think this is the case for your proposed program.

Program Elements

- The program need is clearly indicated by labor market research based on current, valid, and reliable information, statistics and forecasts.
- The program need is based on current and projected employment demand that is not being met by training provided by existing programs.
- The program will lead to jobs demonstrating opportunities for competitive wages and wage progression for program completers.

Standard B: Collaboration: The community college utilizes systemic methods for meaningful and ongoing involvement of the appropriate constituencies.

Program Elements

- The program has been developed through joint ventures and significant systemic working relationships with business, industry, labor communities, and/or workforce development partners, such as:
  - Advisory committees Apprenticeship committees/trusts
  - Business/industry associations or alliances
  - Cooperative Work Experience (CWE) and work-based learning experience sponsors/supervisors
  - Part-time faculty from industry
  - Customized training and development departments

        - Partners/co-applicants in college led grant activities
    - The program has been developed through joint ventures and significant systemic working relationships with educational partners
    - The program is proactive in creating a supportive environment for minority students, students with disabilities, and ELL/LEP students.

Standard C: Alignment: The program is aligned with appropriate education, workforce development, and economic development activities.

Alignment is the demonstrable outcome or produce of collaboration. Programs that are aligned share common outcomes and proficiencies for students and workforce providers. Students can transfer credit or get credit for proficiency. In PK 20 systems, students can move not only vertically but laterally between and among programs, building skills and credit as they go and transitioning to their next step.

Program Elements

- Program is aligned with appropriate PK-20 educational programs and related activities.
- Program supports workforce and economic development initiatives as identified by the local economic and workforce development boards or agencies, state appointed task forces, the Workforce Investment Board, business, and industry associations, and HECC priorities.
- The program is part of a clear career ladder or career pathway with education and training options leading to the program identified and continuing training and career advancement opportunities identified.
- The program and/or related occupations are clearly identified within the appropriate career learning area, career cluster, and career focus area.

Standard D: Design: The community college program leads to student achievement of academic and technical knowledge, skills, and related proficiencies.

Design involves program admission procedures, instructional methodologies, student assessments, learning outcomes, student follow-up processes, performance indicators, program evaluation, and all other aspects of the program of study.

Program Elements

- The program has the curriculum, instruction, and student evaluation systems to assure a sequential program of study that provides students with the instruction and experiences to achieve academic, technical and career related skills.
- The curriculum demonstrates a cohesive instructional program that will lead to the attainment of the academic, and career and technical exit proficiencies and clearly documented program and learner outcomes needed for success in the field of study for the occupational area.

- CTE academic and technical skill performance indicators are used as measurements of program effectiveness.
- The program is designed or may be delivered in distinct segments that contribute to increased student completion and success.
- The college and program affirmatively provide access, accommodations, flexibility and additional/supplemental services for special population and protected classes of students, including students with disabilities, ELL/LEP students, and minoritized students.

Standard E: Capacity: The community college identifies and has the resources to develop, implement, and sustain the program.

The capacity needed will be largely determined by the need and design of the proposed program. The college must have the resources to offer the proposed program without negatively impacting existing approved programs. Capacity may also reflect financial and in-kind resources contributed by partners.

Program Elements

- The college demonstrates the capacity to offer the program and will provide the necessary and accessible facilities and services to assure that all students can attain the skills and knowledge necessary to fulfill program objectives.
- There are sufficient and accessible facilities, instructional materials, and equipment for the program.
- Financial resources are adequate for the implementation and continued operation of the proposed program.
- Personnel resources are adequate for the number of students in the proposed program in fulfilling the stated objectives/outcomes in accordance with bargaining unit criteria for full-time to part-time faculty ratios and accreditation standards.
- Adequate internship, work-based learning experience and/or Cooperative Work Experience sites are available.

Appendix B: Letter of Support

To the Director of Assessment and Curriculum and the Curriculum Committee at Central Oregon Community College:

As advisors to the Early Childhood Education program at COCC, we offer our support of the proposed 1-Year Certificate of Completion, **STEM in Early Learning**. We believe this proposed certificate addresses our regional, statewide, and national needs for elevating the professional development of our early learning workforce by including intentional preparation in the early years for science, technology, engineering, and mathematics.

We are supportive of this proposal and its aim to address rising educators' sense of connection to the STEM areas and their confidence in developing, implementing, and supporting STEM-based activities for young children and their families. We have reviewed the proposed set of courses that center on the underlying concepts and mindsets in the STEM areas, and we agree they provide a solid understanding of young children's learning and developmental needs and the pedagogical content knowledge necessary to engage young children and their families in STEM. We agree this certificate offers a relevant, professional pathway for rising leaders in early learning to grow in their confidence, professionalism, and commitment to STEM as a key aspect of children's learning and development.

We are excited to see that the proposed certificate of completion will be a stackable component with the Associate of Applied Science (AAS) in Early Childhood Education as well as the Associate Arts Oregon Transfer (AAOT) degrees. We look forward to partnering with the Early Childhood Education program to identify collaborative opportunities, including field placement experiences in early learning settings throughout Central Oregon.

Sincerely,

Amy Luhn Amy Luhn (Jun 2, 2023 09:56 PDT)	Family Resource Center, Oregon State University
Karen Prow (Jun 6, 2023 15:56 PDT)	NeighborImpact Child Care Resources
Kimberly Brown Kimberly Brown (May 30, 2023 16:02 PDT)	NeighborImpact Early Head Start/Head Start
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