



4500 Steilacoom Blvd SW, Lakewood, WA 98499-4004

**Board of Trustees Meeting**  
**South Hill Campus, Room 119**  
**Wednesday, April 11, 2018**  
 Study Session CANCELLED  
 Regular Meeting: 4:00-5:10 p.m.

Agenda

<b>4:00</b>	<b>Call to Order, Flag Salute, Introductions</b> .....	Lua Pritchard	
	<b>Adoption of Agenda</b> .....	Lua Pritchard	
	<i>Action</i>		
	<b>Approval of the Regular Meeting Minutes of</b> .....	Lua Pritchard	<b>Tab 1</b>
	<b>March 14, 2018</b>		
	<i>Action</i>		
<b>4:05</b>	<b>President’s Report</b> .....	Joyce Loveday	
	• Student Success Story		
	• PCCC Meeting, March 15		
	• Plumbing Trade Roundtable		
	• Lakeview Light & Power Scholarship		
	• WACTC Committee - Technology		
	• Interviews for SBCTC IT Director		
	• 75 <sup>th</sup> Anniversary Gala Update		
	• Miscellaneous		
<b>4:20</b>	<b>College Reports or Highlights</b>		
	• ASG Report.....	Haley Rye	<b>Tab 2</b>
	• Enrollment Report.....	Scott Latiolais	
	• Update on New Building and Capital Impact.....	Larry Clark	<b>Tab 3</b>
	• One Time Funds Status Update/2018-19 Program Fees.....	Lisa Wolcott	<b>Tab 4</b>
	• Instruction Division Report.....	Mabel Edmonds	<b>Tab 5</b>
	Presentation: Non-Destructive Testing, Charles Musson and Michael Gilmore		
<b>4:50</b>	<b>Chair’s Report</b> .....	Lua Pritchard	
<b>4:55</b>	<b>Board Reports and/or Remarks</b> .....	All	
<b>5:00</b>	<b>Public Comments</b> .....	Lua Pritchard	

**5:05 New Business** .....Lua Pritchard

**Approval to Temporarily Move Local Funds into the CAMT Project**

*Action*

**5:10 Executive Session** .....Lua Pritchard

The Board may hold an executive session for purposes allowed under the Open Public Meetings Act. Legal purposes include, to consider acquisition or sale of real estate; to review negotiations of publicly bid contracts; to receive and evaluate complaints or charges brought against a public officer or employee; to evaluate the qualifications of an applicant for public employment; to review the performance of a public employee; and to discuss with legal counsel matters relating to agency enforcement actions, litigation, or potential litigation. Before convening in executive session, the Board Chair will publicly announce the purpose for executive session and the time when the executive session is expected to conclude.

**5:10 Adjournment** .....Lua Pritchard

*All Board meetings will be recorded.*



4500 Steilacoom Blvd SW, Lakewood, WA 98499-4004

**Board of Trustees Regular Meeting**  
**Rotunda, Building 3**  
**Wednesday, March 14, 2018**  
Study Session: CANCELLED  
Regular Meeting: 4:00-5:45 p.m.

**Minutes**

**Call to Order:** Chair called the Board of Trustees Meeting for Clover Park Technical College (CPTC) to order on March 14, 2018, at 3:59 p.m.

**Board of Trustees Present:**

Lua Pritchard, Chair  
Bruce Lachney  
Mary Moss  
Wayne Withrow

**College President:** Dr. Joyce Loveday

**Assistant Attorney General:** Justin Kjolseth

**Excused Absences:** Mark Martinez, Trustee

**Other Attendees:**

Larry Clark, VP, Finance & Admin.  
Mabel Edmonds, VP, Instruction  
Scott Latiolais, VP, Student Success  
Richard Barton, HVAC Inst.  
Jax Chandler, ASG Leg. Off.  
Loren Davis, Dir., NWCTHS  
Felicia Dennis, Navigator  
Bev Dupuis, Comp. Operator/Spt. Tech.  
Dionna Faherty, English Inst.  
Michael Gilmore, Non-Destr. Test Inst.  
Myra Griffin, Dir., Nursing Prog.  
Michelle Hillesland, Dean  
Janet Holm, Development Manager  
Michele Jones, Med. Asst. Inst.  
Wendy Joseph, Dir., Financial Aid  
John Kaniss, Dir., Facilities Services

Dean Kelly, Dean, Student Success  
Claire Korschinowski, Dean  
Pat Lange, Dir., Transitional Studies  
Ben McConkie, Aviation Maint. Tech. Inst.  
David Meyers, Welding Instructor  
Karen Meyers, Comm. Member  
Darryl Owens, Graphics Tech. Inst.  
Alison Pau, Student Engagement Mgr.  
Hannah Precour, Dental Asst. Inst.  
Jody Randall, CNISS Inst.  
Tyler Scott, Sr. Creative Comm. Mgr.  
Tanya Sorenson, Dean  
Cherie Steele, Exec. Asst. to the President  
Roberta Wirth, Dental Asst. Inst.  
Lisa Wolcott, Dir., Budget/Finance

**Adoption of the Agenda**

**MOTION:**

Motion to adopt the agenda as presented was made by Trustee Withrow, seconded by Trustee Lachney. Approved unanimously.

## **Approval of Minutes (Tab 1)**

### **MOTION:**

Motion to approve the minutes of the Regular Board meeting of February 7, 2018, made by Trustee Moss, seconded by Trustee Lachney. Approved unanimously.

## **President's Report**

### Student Success Story

The scheduled student speaker was absent.

### ACCT National Legislative Summit (NLS)

Trustee Moss and President Loveday attended the ACCT NLS February 11-14. The conference focused on:

- Becoming more informed regarding community college federal legislative priorities
- Sharing higher education priorities with state legislators
  - Reauthorization of the Higher Education Act
  - Deferred Action for Childhood Arrivals and the Dream Act
  - Reauthorize the Perkins Career and Technical Education Act
  - Invest in Education and Workforce Development
- Meeting with legislators - Trustee Moss and President Loveday met with Senators Murray and Cantwell

### Miscellaneous

#### *Legislative Update*

The 2018 Legislative Session has ended, and there were a couple of positive budget updates for CTCs:

- Our system's capital request for the 2017-19 biennium was fully funded, including inflation and local tax increases, which means:
  - The few capital projects on the State Board List below CPTC were funded
  - CPTC received an additional \$2.5 million for the Center for Advanced Manufacturing to cover loss incurred from the delayed capital budget
  - The \$383,000 for facilities projects and staffing that was held up this past year as we waited on the 2017-18 capital budget to pass HAS been received
- The supplemental budget protected the Running Start program by maintaining the current funding rates and policy
- An additional \$18.5 million was provided for the State Need Grant

#### *Tribute to Andy Fritz*

A baby Garry Oak Tree was planted along the walkway between Buildings 17 and 19 in honor of Environmental Science Instructor Andy Fritz. It's small, but it will be 70 feet tall in 100 years. A plaque commemorating the tree will be unveiled on July 28, when the Trek for Tech 5-K Run/Walk will occur in Andy's honor.

#### *Memorialize Dr. Walstrum*

Trustee Lachney asked that a conversation start regarding how to memorialize Dr. John Walstrum and suggested naming the new building in his honor. The idea has been introduced to the Cabinet and College Assembly. More to follow later.

### **College Reports or Highlights**

#### ASG Report (Tab 2)

Jax Chandler, Legislative Officer for Student Council, presented the attached report.

#### FY 2017-18 2<sup>nd</sup> Quarter Budget Report

Ms. Wolcott provided highlights of the attached report.

### **Chair's Report**

No Chair's Report.

### **Board Reports and/or Remarks**

#### ACCT National Legislative Summit, February 11-14, 2018

Trustee Moss echoed President Loveday's comments and said the Summit was excellent.

Trustees were reminded to encourage students to contact their local legislators, invite them to visit campuses, and invite them to events.

### **Public Comments**

None

### **New Business**

Ms. Edmonds asked the Tenure Committee Chairs to introduce the first-year tenure track faculty.

### **Executive Session**

At 4:41 p.m., Chair Pritchard stated that, in accordance with RCW 42.30.110, the Board would recess to go into Executive Session for approximately 30 minutes for the purpose of reviewing, evaluating, and interviewing faculty probationers for tenure award.

Chair Pritchard reconvened the Regular Meeting at 5:04 p.m. and asked if there were any action items as a result of Executive Session. There were.

Trustee Lachney moved that the Board of Trustees, after having given reasonable consideration to the recommendations of the Tenure Review Committee and the President, grant tenure to David Meyers at Clover Park Technical College, seconded by Trustee Withrow. No discussion. Approved unanimously.

### **Next Meeting**

April 11, 2018, at the South Hill campus.

### **Adjournment**

Chair Pritchard adjourned the Regular Meeting at 5:05 p.m.

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**Dr. Joyce Loveday**  
**President**  
**College District Twenty-Nine**

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**Lua Pritchard**  
**Chair, Board of Trustees**  
**College District Twenty-Nine**



## Associated Student Government- April 2018 Monthly Report

### Highlights

The second “Student Success Social” is scheduled for Tuesday, April 24, 2018, 3-4 p.m. This event is intended to recognize the milestones CPTC students accomplished during their Winter Quarter 2018. The pre-determined milestones are: 1. Completing 15-credits, 2. Completing 45-credits, 3. Passing a Math 100 level class, or 4. Passing an English 100 level class. The entire college community is invited to attend this celebratory event held in the McGavick Conference Center.

### Increasing Student Advocacy

In lieu of the “National School Walkout” March 14, 2018, ASG Student Council provided a place for students to express their concerns and ask questions about campus safety and security procedures, inside the Student Leadership & Services Center. Collectively members of student council were able to have conversations with over 70 students. Major areas of concern for students included: providing on-campus mental health resources, improving campus security measures that already exist across campus, and gun/weapon related policy changes. ASG will continue working with students, staff, and faculty to promote a safe campus for all.

The Associated Student Government (ASG) is hiring for student leadership positions for the 2018-2019 academic year! Applications are available online at [www.cptc.edu/studentjobs](http://www.cptc.edu/studentjobs). Students have the opportunity to gain valuable leadership skills, are paid an hourly wage, build their resume, and serve fellow students.

### Shared Governance

The Services and Activities (S&A) Budget Committee approved an \$896,127 operating budget for the 2018-2019 fiscal year (FY) with no increase to the student fee. This is an increase of \$49,127 compared to the previous FY. The proposed budget has been submitted to the Vice President for Student Success in preparation for presentation to the College President. It is expected that this budget will be submitted to the Board in June.

Student Council would like to formally invite you to attend an upcoming meeting this quarter. All meetings are from 4-5 p.m. in Bldg 23, Room 215, unless otherwise noted. Meeting dates are as follows: April 2, 16, 30, May 21, and June 4. To get on the agenda, please e-mail Haley Rye, ASG President, at [asg.president@cptc.edu](mailto:asg.president@cptc.edu).

### Partnership Highlights

The 6th annual Student Awards Ceremony is scheduled for June 6, 2018, 6-7:30 p.m. and is open to those who nominate others or who are nominated. Students, faculty, and staff can nominate individuals in seven award categories through May 8, at [www.cptc.edu/student-awards](http://www.cptc.edu/student-awards). This event celebrates those exemplifying academic and community leadership. There will be appetizers, desserts, entertainment, and a ceremony.

### By The Numbers:

- 501** PB&J Sandwiches distributed March 1-April 4
- 250** Welcome Back Breakfasts distributed
- 306** Students participated in De-Stress week
- 270** Students attended New Student Orientation

### Upcoming Events:

- Music Showcase** April 10, 11 a.m.-12:30 p.m., Bldg. 23
- Cake Decorating** April 16, 6-8 p.m., Bldg. 23
- Bowling Night Hosted by the Veteran’s Club** April 17, 5:45-8 p.m., Bowlero Lanes, 3852 Steilacoom Blvd SW Tacoma, WA
- No School** April 20, ASG & SLSC closed

Tab 3

# CPTC Buildings April 2018



## *Farewell to 22*

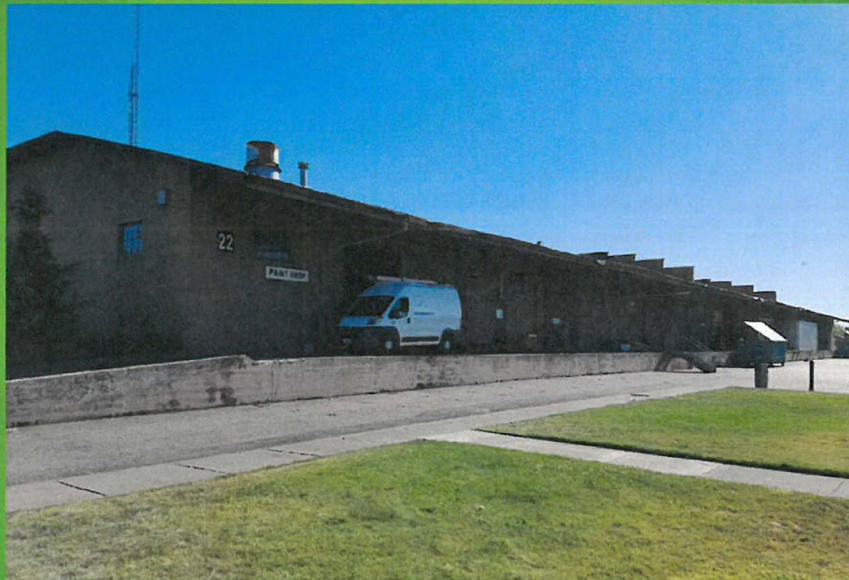


*Farewell to 22*



CLOVER PARK  
TECHNICAL COLLEGE

*Farewell to 22*



CLOVER PARK  
TECHNICAL COLLEGE



*Farewell to 22*



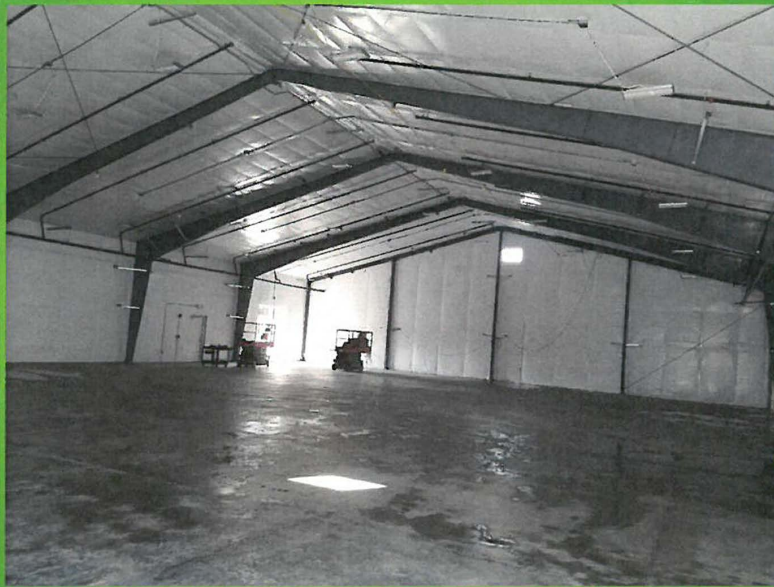
CLOVER PARK  
TECHNICAL COLLEGE

*Hello 23A*



CLOVER PARK  
TECHNICAL COLLEGE

Hello 23A



CLOVER PARK  
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Hello 23A



CLOVER PARK  
TECHNICAL COLLEGE

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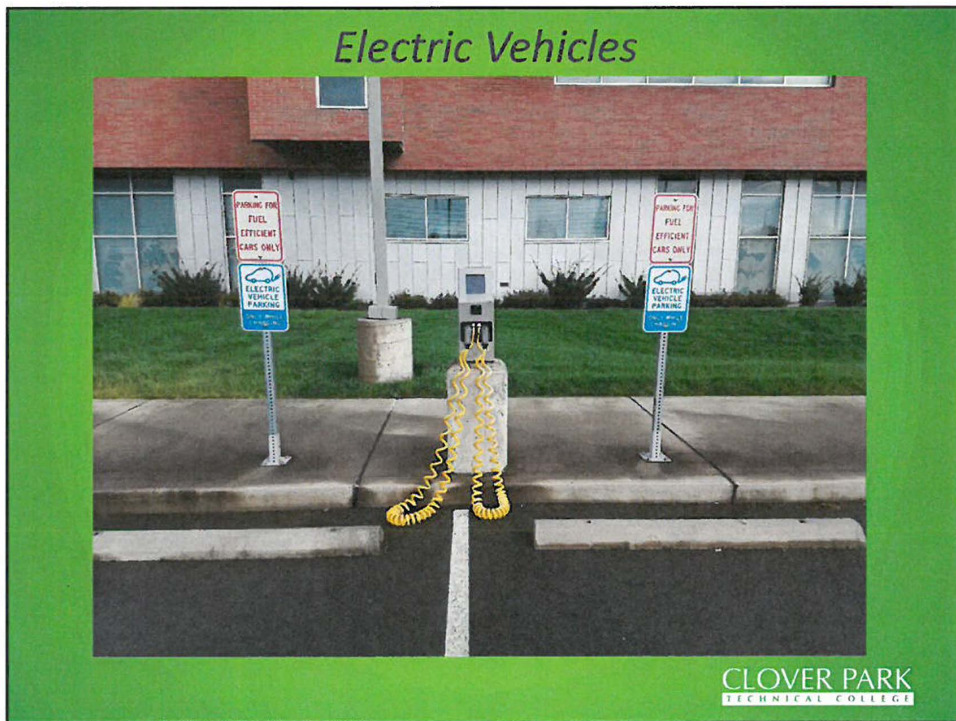


CLOVER PARK  
TECHNICAL COLLEGE

*Temp Storage 16*



CLOVER PARK  
TECHNICAL COLLEGE



FY 17-18 One-Time Funds Status					
	Core Theme	One-Time	Amount Spent	Current Balance	Purchasing Progress
Budget & Finance Audit	Core Theme 3: Institutional Excellence ▼	40,000	32,930.00	7,070.00	This is an estimated amount as we have not been invoiced as of yet, and are currently still being audited. Undergoing an audit is both a requirement of the State of Washington, the Federal Government and Accreditation.
John Deere Mower	Core Theme 3: Institutional Excellence ▼	10,000	7,826.78	2,173.22	Standard equipment needed for grounds crew.
Replace 8 IT Desktop Computers	Core Theme 3: Institutional Excellence ▼	18,400	18,174.00	226.00	Spent so far, we should use most of the rest.
BOT Laptops	Core Theme 3: Institutional Excellence ▼	3,664	3,737	(73.00)	Updating the failing laptops used by the trustees promotes electronic communication methods and avoids costly copying expenses.
Central Services 3M Attest Auto-Reader 490	Core Theme 1: Workforce Preparation ▼	1,200	1,088.53	111.47	The Auto-Reader is used multiple times daily in industry to verify the sterilization process. Having updated equipment better prepares our students to meet industry needs.
Culinary Combi Oven	Core Theme 1: Workforce Preparation ▼	15,000	16,577.32	(1,577.32)	Complete. Needed for continued instruction.
Interior Design Furniture & Equipment	Core Theme 2: Student Success ▼	56,065	56,935.00	(870.00)	New interior design furniture has enhanced the program's learning environment and student success by reconfiguring the workspace and enabling students to make ergonomic adjustments to their desk and access software and drawing tools in a manner that reflects industry's environment.
Program Information Videos	Core Theme 2: Student Success ▼	26,000	26,000.00	-	Vendor has been selected. Contract was signed on 03/14/2018. Programs have been identified, filming is occurring over two weeks in May. This project exceeds the costs provided by one-time funds and a PR has been submitted to expend the full \$26,000.
Advertising Agency	Core Theme 2: Student Success ▼	100,000	90,000.00	10,000.00	Vendor has been selected. Contract was signed on 03/14/2018. PR for \$90,000 submitted to encumber funds. Additional funds will support project management necessary to implement the campaign by Sept. 2018. These funds will need to carry over into the 18-19 FY. Prospective student lead generation as a result of this contract and its deliverable advertising plan will be proven using email marketing reports, website analytics, retargeting results, conversion tracking, and Google- click to call reports to show exactly how many people were driven to the door of the college by the marketing campaigns.
75th Anniversary Event Activities	Core Theme 3: Institutional Excellence ▼	51,000	35,773.64	15,226.36	Planning is well underway for the Gala. We expect to come in under budget on this item, by approximately \$4,000.
Guided Pathways and College Promotion Supplies	Core Theme 2: Student Success ▼	6,700	4,429.87	2,270.13	College promotional items have been ordered. This project is complete.
Welcome Center Promotional Work	Core Theme 2: Student Success ▼	12,000	11,208.00	792.00	The center opened March 2018.
Childcare Center	Core Theme 2: Student Success ▼	100,272	50,000.00	50,272.00	Deficit projected to be under budget for FY 17-18.
Alma	Core Theme 2: Student Success ▼	28,000	28,000.00	-	
Welding Shear, Welding Machines	Core Theme 2: Student Success ▼	85,000	78,219.00	6,781.00	The new machines replaced a few of the program's old and unusable welding machines. A plasma cutter enhanced the learning environment and student success by offering access to high tech machinery and competency development on a programmable/computer operated equipment.
New Welcome Center:					
Move President's Office	Core Theme 3: Institutional Excellence ▼	10,000	9,230.71	769.29	Work is completed, we are awaiting invoices
Furniture for Welcome Center	Core Theme 2: Student Success ▼	31,000	31,675.68	(675.68)	The center opened March 2018.
1st Half of Master Plan due in FY19	Core Theme 3: Institutional Excellence ▼	40,000	-	40,000.00	We are too late to bid this out. We'd expected the total cost to be about \$60K, so we'd like to extend this to next year.
Pastry Arts Orders not received prior to 6/30	Core Theme 1: Workforce Preparation ▼	11,793	11,792.27	0.73	Complete
		\$ 646,094	\$ 513,598	\$ 132,496	

## 2018-2019 FEES

<u>FEE CD</u>	<u>TITLE</u>	<u>FY 18-19 RATES</u>
51	JOB-PROF PILOT	\$ 2,500.00
95	NURSING EXPENSES	\$ 94.15
AC	AUTOMOTIVE COLLISIO	\$ 32.25
AE	ARCHITEC ENGNRNG LAB	\$ 29.20
AF	AUTOMOTIVE TECH	\$ 32.25
AM	AVIATION MAINTENANCE	\$ 50.00
AR	AUTOCORE	\$ 50.00
AV	AVIONICS	\$ 50.00 *
BC	BACKGROUND CHECK	\$ 95.00
BI	BIOLOGY LAB FEE	\$ 30.00
CB	CONSTRUC/BLDG MATERIAL	\$ 32.25
CF	RECORDS PROCESSING FEE	\$ 4.95
CG	ACAD COMP USE FEE	\$ 4.90
CH	CHEMISTRY LAB FEE	\$ 33.80
CK	TRADE/TECH COMP FEE	\$ 4.90
CL	CENTRAL SERVICES	\$ 40.00 *
CN	CNISS LAB FEE	\$ 52.00
CO	COSMETOLOGY MATERIAL F	\$ 84.40
CP	ADVANCED COMPOSITES	\$ 52.00
CR	HEALTH/CLNT COMP FEE	\$ 5.10
CU	CULINARY ARTS LAB FEE	\$ 140.70
DE	DIGITAL ENTERTAINMENT DESIGN	\$ 25.00 *
EC	ECS 125 RESOURCE RM	\$ 10.00
EE	ECE CONSUMABLE SUPPLY	\$ 3.00
EF	EXTHETICS EXAMINER FEE	\$ 31.20
EL	ENVIRON SC CHEMISTRY	\$ 26.00
ET	ESTHETICS MATERIAL FEE	\$ 72.45
FD	HVAC EPA CERT TEST FEE	\$ 44.00
FE	FSME	\$ 26.00
FM	FORD MLR PROGRAM FEE	\$ 150.00
GP	GRAPHIC DESIGN MAT FEE	\$ 64.00
HE	HEMODIALYSIS LAB FEE	\$ 29.00
HL	HISTOLOGY LAB FEE	\$ 43.25
HR	HEALTH RECORD SUBSCR	\$ 79.00
HV	HVAC LAB FEE	\$ 40.00
IN	INTERIOR DESIGN FEE	\$ 50.00
LA	LASSI	\$ 25.00
LP	LPN MASTERY SERIES FEE	\$ 116.25
LV	ELECTRONIC LOW VOLTAGE	\$ 25.00


\* NEW FEE

## 2018-2019 FEES

<u>FEE CD</u>	<u>TITLE</u>	<u>FY 18-19 RATES</u>
MA	MEDICAL ASSISTING FEE	\$ 27.00
MB	MECHATRONICS ASSESS FE	\$ 35.00
MG	MASSAGE MATERIAL FEE	\$ 73.00
MH	MECHATRONICS	\$ 20.00
MK	MEDICAL LAB TECH FEE	\$ 28.05
MN	MANUFACTURING MATERIAL	\$ 40.55
MS	NON DESTRUCT TESTING	\$ 45.00
NA	NURSING ASST LAB FEE	\$ 40.00
NC	NURSING CONSORTIUM	\$ 100.00
NT	NDT ASSESSMENT FEE	\$ 145.00
PA	PASTRY ARTS FEE	\$ 112.50
PE	PHARMACY TECHNICAL TEST FEE	\$ 142.00
PH	PHLEBOTOMY FEE	\$ 83.20
PO	PHARMACY TECH LAB FEE	\$ 95.20
RN	RN MASTERY SERIES FEE	\$ 153.10
SF	SIMULATION FEE	\$ 25.00 *
ST	SURGICAL TECH FEE	\$ 16.20
UP	UPHOLSTERY	\$ 45.00 *
WA	DENTAL ASST TEST FEE	\$ 274.00
WB	MASSAGE EXAMINER FEE	\$ 36.40
WC	SURGICAL TECH TEST FEE	\$ 265.00
WM	WELDING MATERIAL FEE	\$ 113.60
WT	WELDING CERT TEST FEE	\$ 150.00

\* NEW FEE

Tab 5



**Nondestructive Testing Program**  
**AAS**  
**AAST**  
**Certificate**

**Program overview:**

- AAT Nondestructive testing Total Credits: 126
- AAS-T Nondestructive testing Total Credits :131
- Individual Method Certifications
- Program Length is 8 quarters
- Maximum 18 students per class
- Course Content is regulated by ANSI/ASNT CP-105
- Training hours are compliant and exceed SNT TC-1A,
- ANSI/ASNT CP-189 and NAS-410
- Instructors are qualified under ASNI/ASNT CP-189



### **Instructor: Michael Gilmore**

Michael Gilmore has worked in the Non-Destructive Testing (NDT) field since 1991 covering ship structures, submarines, and aviation. Over the span of twenty years in the United States Navy, he held a multitude of leadership and managerial positions involving the fabrication, repair, and inspection of aircraft, submarine, and surface ship structures. He was a successful Recruiter/Canvasser, Certified NDT Level II in Liquid Penetrant, Magnetic Particle, Visual, Eddy Current, Radiography (Radiation Safety Officer, digital), and Ultrasound (Shearwave, TTU, Phased Array (Tomo-view) a qualified Zone Manager, and Lean Six Sigma Green Belt practitioner.

### **Instructor: Douglas Evans**

Douglas Evans was introduced to Nondestructive Testing (NDT) through the United States Air Force, in 1982. He has trained a countless number of trainees using the dual on-the-job (OJT) training method, since 1986. He believes NDT to be an exciting career field due to the variety of work involved. One day he's inspecting a part using Ultrasonic Testing (UT) and the next day he's in the main landing gear of an aircraft using Magnetic Particle Testing (MT). His vast knowledge and experience comes from performing numerous inspections in the military aerospace industry.

### **Instructor: Douglas Evans (continued)**

Doug's experience includes: C-130 Hercules, C-5 Galaxy and C-17 Globemaster III transport aircraft; A-10 Thunderbolt II, F-15 Eagle, F-117 Nighthawk, F-4 Phantom II and T-38 Talon fighter aircraft; HH-53 Pave Low, UH-1N Huey, CH-47 Chinook and UH-60 Blackhawk helicopters. He is qualified as a NAS-410 Level 2 in PT, MT, UT, ET and RT with over 30 years of experience. Doug is currently employed at Joint Base Lewis-McChord (JBLM) in the 62<sup>nd</sup> Maintenance Squadron, Nondestructive Testing Lab at McChord Field, WA.

### **Instructor: Charles Musson**

- Chuck Musson is the Nondestructive Testing (NDT) instructor over the methods of Electromagnetic Testing (ET), Ultrasonic Testing (UT) and Radiographic Testing (RT). He has been in NDT since 1976 and has worked for the following companies:
- National Airmotive Corporation (1977 - 1978): Magnetic Particle Testing (MT) – Level II; Liquid Penetrant Testing (PT) – Level II
- Lockheed Missiles and Space Company (1978 – 1981): MT – Level II; PT – Level II; ET – Level II; UT – Level II and RT – Level II

### **Instructor: Charles Musson (Continued)**

- **Aerojet Corporation (1981 – 1990): RT – Level II and RT – Level III**
- **The Boeing Company (1990 – 2014): ET – Level II; UT – Level II; RT – Level II and RT – Level III**
- **Clover Park Technical College: Instructor (2014 – Current)**
- **He holds professional certifications in The American Society for Nondestructive Testing (ASNT) Level III Certifications (Since 1998): ET, UT and RT**

### **Instructor: Charles Musson (Continued)**

- **He has professional memberships in the following organizations:**
  - **ASNT; The American Society For Nondestructive Testing**
  - **The Pacific Northwest Chapter of the ASNT (PNWASNT), Educational Chairperson**
  - **ASTM; American Society For Testing and Materials**

## Introductory Quarters

First two quarters are the prerequisite courses including:

- Introduction to NDT
  - Materials and Processes for NDT I & II,
  - Blueprint Reading
  - Introduction to Composites for Non-Composites Technician
  - Introduction to Welding for Non-Welding Major.
- The first two quarters are the foundational quarters of the program where students are given the basic knowledge of what NDT is and what we as future technicians will be doing.
  - All Students are required to take these two quarters before attending any NDT method courses.

## Liquid Penetrant Testing (PT)

- This course is taught in conjunction with Magnetic Particle and Visual Inspection in one quarter. Course is a Hybrid setting with lecture primarily done though NDT Classroom and reviews and labs run by Doug Evans.
- Students are taught All methods of PT and trained in both type I & II using both Flawtech specimens and actual parts that would be used in production.
- Students are graded on accuracy of inspection and report quality.

### Liquid Penetrant Testing (PT)

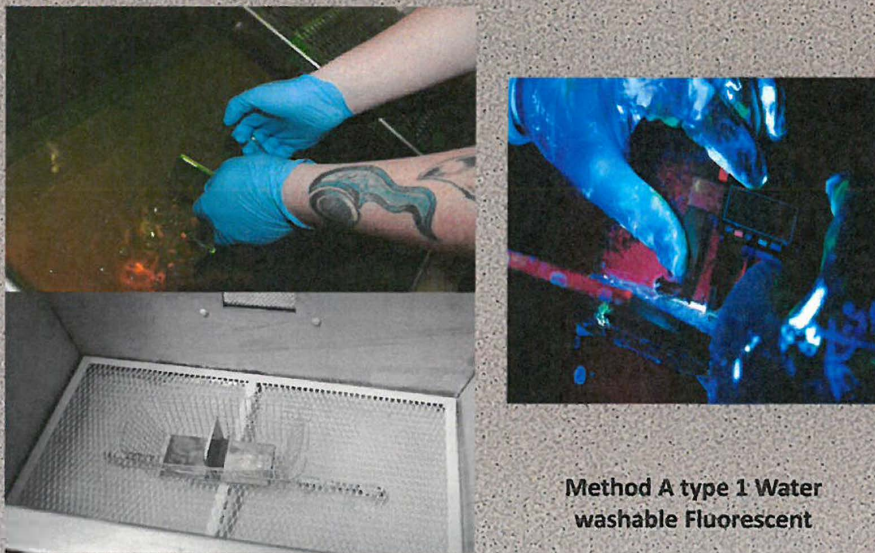


Method C type 2 Solvent based Red Dye



Method C type 1 Solvent based Fluorescent

### Liquid Penetrant Testing (PT)



Method A type 1 Water washable Fluorescent

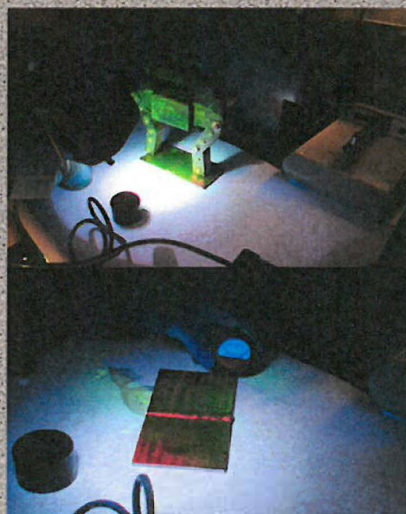
## Magnetic Particle Testing (MT)

- This course is taught in conjunction with Liquid Dye Penetrant and Visual Inspection in one quarter. Course is a Hybrid setting with lecture primarily done though NDT Classroom and reviews and labs run by Doug Evans.
- Students are introduced to the basics of Magnetic particle inspection both Dry powder (Yoke) and wet fluorescent methods using both Flawtech Specimens and parts that would be used in production.
- Students are graded based on inspection accuracy and quality of report.

## Magnetic Particle Testing (MT)



Red powder Yoke



Fluorescent Yoke

## Visual Testing (VT)

- This course is taught in conjunction with Magnetic Particle and Liquid Penetrant in one quarter. Course is a Hybrid setting with lecture primarily done though NDT Classroom and reviews and labs run by Doug Evans
- Students are taught the basics of Visual inspection, Remote Visual Inspection (Borescope) and Tolerance testing on several welds and on actual aircraft.
- Students are graded based on inspection accuracy and quality of report.

## Visual Testing (VT)



Weld measurements



Borescope inspections

## Eddy Current Testing (ET)

This class is broken down into three phases; Eddy Current I is predominantly online with reviews and math study in class.

Eddy Current II is hybrid with lecture done online reinforced by in class reviews and introductory labs.

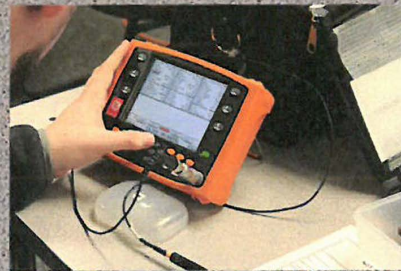
Eddy Current III is all labs and includes inspection of multiple parts that would be seen in the industry.

Students are taught via lecture and labs how to identify and use the following:

- Conductivity curves
- Permeability curves
- Thinning curves
- Gap/spacing curves
- Plating curves
- Effective depth of penetration
- Edge effect and lift off on permeable material
- Crack phase angles at increasing material depths
- Filters for manual scanning
- Semi-automated bolt hole scanning
- Direct conductivity and lift off
- Creating and writing a procedure from start to finish.



## Eddy Current Testing (ET)

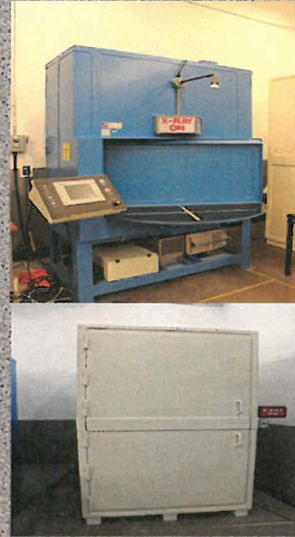




## Radiographic Testing (RT)

This class is broken down into three phases:

- Radiographic Testing I is predominantly online with final reviews and math study in class.
- Radiographic Testing II is hybrid with lecture done online reinforced by in class reviews of lecture and math and Radiation Safety.
- Radiographic Testing III is all labs, separated into two sections  
 Computed Radiography (CR) and Film includes inspection of multiple parts that would be seen in the industry.  
 Digital Detector Array is in the process of curriculum development.



## Radiographic Testing (RT)

Students are taught via lecture and labs how to identify and use the following:

### Computed radiography:

- Use and manipulation of CR imaging software
- EPS charts
- Display and scanner process controls
- Linear and logarithmic image generation

### Film radiography:

- How to properly operate densitometers
- How to properly operate various film viewers
- Dark room and film processing
- Film speeds and cassettes
- Interpretations of casting films per MIL-STD 2175A and ASTM-155
- Full creation of a technique for film radiography

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## Radiographic Testing (RT)



Computed Radiography



Film interpretation

## Radiographic Testing (RT)



Digital Detector Array

## Ultrasonic Testing (UT)

This class is broken down into three phases;

- Ultrasonic I is predominantly online with reviews and math study in class.
- Ultrasonic II is hybrid with lecture done online reinforced by in class reviews and introductory labs.
- Ultrasonic III is all labs and includes inspection of multiple parts that would be seen in the industry.

Immersion testing is currently in the procedure development phase.



Olympus USM/DSM Go

Students are taught via lecture and labs how to identify and use the following:

- Auto Calibration
- Manual calibration
- TCG/ DAC curves
- UT Longitudinal wave Pulse Echo and Through Transmission.
- UT Shear wave weld inspection
- Bond Testing



Immersion testing tank

### Ultrasonic Testing (UT)



### Ultrasonic Testing (UT)



## Soft Skill Taught

Students throughout the program are taught several soft skills that are reinforced as the program progresses:

- Problem Solving
- Critical Thinking
- Teamwork
- Working under pressure
- Integrity
- Mentorship

## Companies That Have Hired CPTC Graduates

- The Boeing Company
- MISTRAS
- Exotic Metals Forming Company
- Precision Castparts Corporation
- PM Testing
- Mayes Testing
- Hexcel
- Zodiac Aerospace
- Sperry Rail Services
- Bradken-Atlas LP
- Hytek/Esterline
- Art Brass Aerospace
- Propulsion Controls Engineering
- Pacific Propeller International LLC
- Terracon
- Imaginetics

Students hired right out of school or even while in school.

We currently have a student that has been hired by Exotic Metals Forming Company with two quarters left before graduation.

## **Job Positions CPTC Graduates Can Qualify For**

- **NDT Trainee**
  - **NDT Level I**
  - **NDT Level II**
  - **NDT Level III**
- **NDT Equipment Salesperson**

## **Miscellaneous Topics**

**Future Curriculum: Due before 6/2019**

- **Digital Radiography (Elective):**
  - **Computed Radiography**
  - **Digital Detector Array**
- **Ultrasonic Phased Array (Elective):**
  - **Linear Array: Composite Parts**
  - **Angle Beam: Weld Inspection**