



Advisory Committee Minutes

June 13, 2024

Time: 8:30 am
Building 69 – 21

Attending Members:

X	Lanny Richardson. Faculty. Mt. SAC*	X	Fred Kobzoff. Department Chair. Mt. SAC*	X	Mario Hernandez. Faculty. Mt. SAC*	X	Art Cardina. Faculty. Mt. SAC*	X	Rachael Brown. Director, Work Based Learning. Mt. SAC*
X	Darrow Soares. Faculty, Emeritus. Mt. SAC*	X	Valarie Rodriguez. BAS Technician. Schneider Controls Faculty, Mt. SAC*	X	Lance Heard Dean, Technology & Health Mt. SAC*	X	Sarah Pletz Associate Dean, Technology & Health Mt. SAC*	X	Devin Roundy Service Foreman A.O. Reed Co.
X	Luis Soto VP Business Dev. TCI Mechanical Serv. Chino, CA	X	Richard Dones VP Operations. Alliance Industrial Refrigeration	X	Keith Horton Service Manager. Alliance Industrial Refrigeration	X	Dave Muro. Technical Training Manager. Climatec	X	Steve Adams Recruiter Industrial Refrigeration Pros
X	Natalie Avelar Service Mgr. Johnson Controls	X	Athena Chiera VP Business Dev. Athena Engineering Inc.	X	Frances Lepe Talent Acquisition ABM Facilities Services	X	Forrest Brown Superintendent, So Reg. ACCO. Pasadena, CA	X	Jose Covarrubias. Trainer. Accutherm. Garden Grove, CA
X	Scott Gibbs, Serv. Mgr. TEM Temporary HVAC Solutions. Anaheim, CA	X	Matthew Randolph Install Department Manager. TEM Temporary HVAC Solutions	X	Hector Chacon. Refrigeration Maintenance Manager, Albertsons Companies	X	David Muro. Technical Training Manager, Climatec. Mineola, Texas	X	Trenton Ferrara. Service Manager, Emcore Group Inc. Irvine, CA
X	Harold Leib Forman, Systems & Services, N. American Johnson Controls	X	Stephen Fenton Master Technician, Foreman Johnson Controls	X	Mark Burnside HVACR Recruiter PIPE United Associated	X	Beverley Keith Corporate Recruiter, Arcticom Group. Mira Loma, CA.	X	Hector Chacon Albertsons Companies
X	Archie McLay McLay Services La Verne, CA	X	Eric Torres Service Manager. TCI Mechanical Services. Chino, CA.	X	Ryne Smith Controls Specialist TCI Mechanical Serv. Chino, CA.		Kevin Smith Assistant Dist. Mgr. ABM Facilities Services		

Welcome and Introductions

Kobzoff

Department Chair, Fred Kobzoff, welcomed the AIRC Advisory Committee Members to Mt. San Antonio College. Members introduce themselves, the company they worked for, and their background in the industry.

F. Kobzoff reviewed the purpose and function of the AIRC Advisory Committee:

To maintain the relevance of the curriculum and meet the Student Learning Outcomes required for entry level HVACR employment in our local HVACR Industry.

Kobzoff expressed his sincere appreciation of the Advisors and their importance to the program.

Curriculum Review and Update

Kobzoff / Richardson

Kobzoff indicated that 4 of the 10 courses in the AIRC Certificate and Degree are continuing in the Curriculum and Instruction review process. These are changes based on recommendations from the 6/2/2023 Advisory Committee Members.

The courses were identified as:

AIRC 10 Technical Math for Air Conditioning and Refrigeration

AIRC 12 Air Conditioning Codes and Standards

AIRC 32 Air Properties and Measurement

AIRC 34 Commercial Systems

Kobzoff also reviewed enrollment and completion rates. According to the College's data, enrollment and completion remain strong for this program. During Kobzoff's presentation, A. Chiera of Athena Engineering inquired about non-traditional female enrollment numbers. F. Kobzoff and L. Richardson reported that current enrollment for Female students are in the low single digits. Discussion ensued on how to attract women into the HVACR Trade.

Women in HVAC.

There were seven (7) women represented on advisory committee, including two Mt SAC Administrators. Several discussed their path into the HVACR trade or into the administration of the trade. Only 1 entered through a community college training program. F. Lepe of ABM Facilities Services and B. Keith of the Arcticom Group described their path into the HVACR business. Both indicated their transition would have been easier with a formal introduction to the trade. The advisory offered suggestions on how to attract women through practical, but non-traditional methods. Some methods included:

- Partnering with the Mt. SAC Business Division to offer courses and/or mini certificates in HVACR management that may include (a) Cost Estimating and Procurement (b) Human Resource Management for the Trades (c) Facilities Management and Hospitality.
- Develop a mini certificate specifically for Refrigerant Compliance and Regulations. This is in response to the HFC refrigerant phase down and compliance requirements under the American Innovation and Manufacturing Act of 2020.

Kobzoff suggested that the advisory reconvene to prioritize methods to attract and serve non-traditional students in the AIRC program more effectively.

Supermarket Refrigeration Curriculum and Program. Soares

D. Soares reviewed the Certificate and A.S. Degree in Supermarket Refrigeration. Curriculum was submitted to Curriculum and Instruction in May of 2024.

Required Certificate Courses:

Requirements	Dept. Name/#	Name	Units	CSU-GE	IGETC	Sequence
	AIRC 10	Technical Mathematics in Air Conditioning and Refrigeration	2	NA	NA	Yr. 1 Fall
	AIRC 11	Welding for Air Conditioning and Refrigeration	2			Yr. 1 Fall
	AIRC 20	Refrigeration Fundamentals	4			Yr. 1 Fall
	AIRC 25	Electrical Fundamentals for Air Conditioning and Refrigeration	5			Yr. 1 Fall
	AIRC 31	Commercial Electrical for Air Conditioning and Refrigeration	4			Yr. 1 Spring
	AIRC 50	Commercial Refrigeration	4			Yr. 1 Spring
	AIRC 52	Supermarket Refrigeration	3			Yr. 2 Fall
	AIRC 54	Transcritical CO2 Refrigeration Systems	3			Yr. 2 Spring
	AIRC 95	Work Experience in Air Conditioning and Refrigeration	2			Yr. 2 Spring

Required Major Total 29.0

Local Mt. San Antonio College General Education Requirements 24.0

Transferable Prerequisites for the Major NA

Degree Total 53

The Department worked closely with advisory members from the June 2023 Advisory Meeting. This work and review process occurred during site visitations and online discussions.

The CCC Curriculum Inventory Narrative, and the Course Outlines for AIRC 50, AIRC 52, and AIRC 54, were formally sent out for comment on June 5th. Soares followed up with phone calls and messages requesting their review of the new courses and A.S Degree before the June 13th Advisory meeting.

The Advisory Committee approved the course curriculum for AIRC 50, AIRC 52 and AIRC 54 on June 13th, 2024, as submitted but recognized the following challenges in teaching the new required courses:

- Required Field Trips for AIRC 52 and AIRC 54. The Advisory recognizes that the AIRC program does not have the lab facilities to support practical instruction in Supermarket Refrigeration. Three businesses indicated support the Field Trip requirement. They include Alliance Industrial Refrigeration, Climatec, and Accutherm Refrigeration.
- Work Experience Requirements. The Advisory also recognized that work-based learning will be an integral part of the new degree and certificate and agreed to participate and support the requirement as long as the infrastructure exists at Mt. SAC.
- Teachers meeting the minimum qualifications. Soares indicated that the AIRC program will be seeking qualified instructors with an A.S. Degree to teach the AIRC 54 Class, *Transcritical CO2 Refrigeration Systems*. Alliance Industrial indicated they have qualified technicians with A.S. Degrees currently involved in training incumbent workers.

The only concern was voiced by J. Covarrubias of Accutherm. He felt the program was not being offered soon enough. According to D. Soares, if all goes well with the approval process, enrollment will begin the Fall of 2025.

Work Experience.

Rachael Brown provided an overview of Work Experience at Mt. SAC and indicated she would be an integral part of supporting the Work Experience Requirements for the certificate and degree in Supermarket Refrigeration. In addition, she covered the following points:

- Work Experience covers the Workers Comp if the students are not compensated.
- Employers are not obligated to permanently hire work experience students if they are not satisfied with their work.
- R. Brown described the structure of work experience, answered all questions, and promoted the program.

Student Speed Interviews

L. Richardson and F. Kobzoff organized the advisors for the next phase of the meeting: Student Speed Interviews. During this phase, students demonstrate lab projects and explain the procedures, and demonstrate what they learned. The advisors use this opportunity to interview program completers and those close to graduation to consider them for employment. The Speed Interviews began at 10:30 am with lunch at 12:30 pm. The students were prepared by Rachael Brown to present their resumes and discuss their career goals.

F. Kobzoff followed up with all those in attendance with a review of the Advisory Meeting and appreciation for their support of students and the program.

Respectfully submitted,

Mario Hernandez
Air Conditioning and Refrigeration
Mt. San Antonio College