Solar Energy Technical Training Directory

MASTER

George Corcoleotes Katherine Kramer Kevin O'Connor

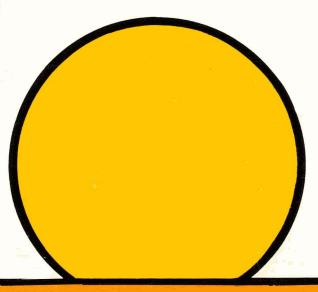
Solar Energy Research Institute

June 1979

Prepared for the
United States Department of Energy
Contract No. EG-71-C-01-4042

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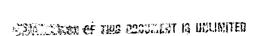
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Printed in the United States of America.

Preface

This **Directory** was prepared as part of Task #4228, Vocational Training Programs, of the Academic Programs Branch of the Solar Energy Research Institute (SERI). The report reflects the current status of available solar energy educational offerings in the technical training area. The completeness of the **Directory** reflects the most thorough effort to gather national information on solar educational courses, programs and curricula.

Approved for:

Solar Energy Research Institute

George Warffeld

Director for

Technology Dissemination

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Solar Energy Technical Training Directory

First Edition

Introduction

The **Solar Energy Technical Training Directory** is prepared by the Solar Energy Research Institute (SERI) as a subset of the first edition of the **National Solar Energy Education Directory**. This technical training directory is intended to be a quick reference for students, counselors, researchers, and others having an interest in solar technical training programs.

Most institutions currently reporting technical training programs are vocational-technical schools and community or junior colleges. Information was gathered from a 1978 national survey of post-secondary institutions. Only those institutions which indicated offering solar technical training activities are included in the **Solar Energy Technical Training Directory.**

All survey information is maintained in the computerized Education Data Base produced by SERI's Academic and International Programs and Information Systems Divisions in cooperation with the Office of U.S. Congressman George E. Brown, Jr., and the Congressional Solar Coalition. The Education Data Base is one of many data bases being developed for the Solar Energy Information Data Bank, mandated by Congress to provide solar information to Government, the scientific and educational communities, and the private sector. SERI is leading the development of the Solar Energy Information Data Bank on behalf of the U.S. Department of Energy.

Note to Users

Secondary sources of information used in this report are indicated by an asterisk (*) in the directory text. The list of institutions to which the surveys were addressed was obtained from the National Center for Education Statistics. Revisions or additions to be included in future editions of this publication may be addressed to Academic Programs Branch, Attn: George Corcoleotes, Solar Energy Research Institute, 1536 Cole Blvd., Golden CO 80401. Telephone (303) 231-1831 Numbers in parentheses to the right of institution names are for identification and should be used when submitting revisions or additions.

Directory Organization

The Directory lists institutions alphabetically by state. Each listing includes an institution address and telephone number, solar programs or curricula offered and detailed solar course information. An alphabetical index of institutions appears at the back of the Directory.

^{*}The **National Solar Energy Education Directory** may be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402; stock number 061-000-00210-3, price \$4.75. The**National Directory** includes complete information (indexed, 279 pages) on solar courses, programs, and curricula offered by all post-secondary institutions.

ALABAMA, ALASKA

None

ARIZONA

Yavapai College

Prescott, Arizona 86301

(602) 445-7300

Programs and Curricula

Solar Energy Technology

Minkler, L./ Beverly, G./ Strom, L. Contact:

(602) 445-7300 Students Taking or Completing Offering:

Do-it-yourself Homeowner,

Installer-Residential (Solar Systems)

Solar Related Courses

Here Comes the Sun

Instructor:

Minkler, Lyle

(602) 445-5264

Course Number:

PAS100 Science

Department:

Program or Curriculum: Solar Energy Technology

Credits: Duration:

5 Weeks, 3.0 hrs per week

Contact Hours: Classroom:

15 15

Topics Covered Extensively: Heat and Energy Transfer; Intro. to Solar Energy; Solar Economics; Solar Collector

Evaluation/Design

Number of Times Taught: 1 Average Enrollment:

Methane, Wind-Electricity, Wood-Alternate Energy

Instructor:

Beverly, Gary (602) 445-7300

Course Number: PHS109

Department:

Science

Program or Curriculum: Solar Energy Technology

Credits:

Duration:

5 Weeks, 3.0 hrs per week

Contact Hours: 15 Topics Covered Extensively: Alternate Energy Sources;

Appropriate Technology; Biomass Conversion; Elec'l

Generation, Small Scale Number of Times Taught: 4

Average Enrollment:

Solar Cookers

Minkler, Lyle Instructor:

(602) 445-5264 PHS105

Course Number:

Department: Science

Program or Curriculum: Solar Energy Technology

Credits:

Duration:

5 Weeks, 3.0 hrs per week

Contact Hours:

Topics Covered Extensively: Solar Collector Evaluation/

Design

Solar Greenhouse

Instructor:

Beverly, Gary

(602) 445-7300

Course Number:

PHS107

Department:

Science

Program or Curriculum: Solar Energy Technology

Credits:

Duration:

Contact Hours:

5 Weeks, 3.0 hrs per week 15

Topics Covered Extensively: Appropriate Technology; Energy Storage; Heat and Energy Transfer; Passive Solar Technology; Solar System Components; Solar Systems

Design; Space Heating Number of Times Taught: 5 Average Enrollment:

Solar Heating, Air and Water Systems

Instructor:

Minkler, Lyle

(602) 445-5264

Course Number:

PHS101 Science

Department:

Program or Curriculum: Solar Energy Technology

Credits:

Duration: Contact Hours: 5 Weeks, 3.0 hrs per week

Topics Covered Extensively: Appropriate Technology; Energy Storage; Solar System Components; Solar Systems

Design

Number of Times Taught: 1 Average Enrollment:

Solar Heating, Passive and Hybrid Systems

Instructor:

Frerking, Mike

Course Number: Department:

PHS102 Science

Program or Curriculum: Solar Energy Technology

Credits:

Duration: 5 Weeks, 3.0 hrs per week

Contact Hours: 15

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Passive Solar Technology; Solar System Components; Solar Home Construction; Solar Collector

Evaluation/Design; Space Heating

Number of Times Taught: 1 Average Enrollment:

Solar Heating, Retrofit Systems

Minkler, Lyle Instructor:

(602) 445-7300

Course Number: PHS104 Department:

Science Program or Curriculum: Solar Energy Technology

Credits:

Duration: 5 Weeks, 3.0 hrs per week

Contact Hours: 15

Topics Covered Extensively: Appropriate Technology; Energy Storage; Heat and Energy Transfer; Solar System Components; Solar Economics; Solar Law/Legislation; Solar Collector Evaluation/Design; Solar Systems Design;

Space Heating

Solar Hot Water

Beverly, Gary

(602) 445-7300 Science

Course Number:

PHS103

Department:

Program or Curriculum: Solar Energy Technology

Credits: Duration:

Instructor:

5 Weeks, 3.0 hrs per week

Contact Hours:

15

Topics Covered Extensively: Appropriate Technology; Energy Storage; Heat and Energy Transfer; Plumbing Techniques; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Design;

Domestic Hot Water Number of Times Taught: Average Enrollment:

Solar Laboratory 121

Instructor:

Minkler, Lyle

Course Number:

(602) 445-7300 PHS121

Department:

Science

Program or Curriculum:

Solar Energy Technology

Credits: Duration: Contact Hours:

6 Weeks, 4.5 hrs per week 27 6

Classroom: Laboratory:

21 Topics Covered Extensively: Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating; Space

Cooling

Number of Times Taught: 1 Average Enrollment:

Solar Laboratory 122

Instructor: Minkler, Lyle

(602) 445-7300

Course Number:

PHS122 Science

Department: Program or Curriculum:

Solar Energy Technology

Credits:

Duration:

6 Weeks, 4.5 hrs per week

Contact Hours: Classroom: 6 Laboratory: 21

Topics Covered Extensively: Solar Systems Installation; Solar Systems Maintenance, Solar Systems Testing and Evaluation, Domestic Hot Water; Space Heating; Space Cooling

Number of Times Taught: 1 Average Enrollment:

Solar Laboratory 123

Minkler, Lyle Instructor:

(602) 445-7300

Course Number: Department:

PHS123 Science

Program or Curriculum: Solar Energy Technology

Credits: Duration:

6 Weeks, 4.5 hrs per week

Contact Hours:

27

Classroom: 6 Laboratory: 21

Topics Covered Extensively: Solar Systems Installation: Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating; Space Cooling

Number of Times Taught: 1 Average Enrollment:

Solar Laboratory 124

Instructor:

Minkler, Lyle

(602) 445-7300

Course No. Department: PHS124 Science

Program or Curriculum: Solar Energy Technology

Credits:

Duration:

6 Weeks, 4.5 hrs per week 27

Contact Hours: . Classroom: 6 Laboratory: 21

Topics Covered Extensively: Solar Systems Installation: Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating; Space

Number of Times Taught: 1

Average Enrollment:

Solar Laboratory 125

Instructor:

Minkler, Lyle (602) 445-7300

Course Number:

PHS125

Science

Department:

Program or Curriculum: Solar Energy Technology

Credits:

Duration:

6 Weeks, 4.5 hrs per week

Contact Hours: Classroom:

27

Laboratory: 21

Topics Covered Extensively: Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating; Space Cooling

Number of Times Taught: 1

Average Enrollment:

ARKANSAS

Mississippi County Community College [12860]

Blytheville, Arkansas 72315

(501) 762-1020

Programs and Curricula

Solar Energy Technology

Degree: AD, Applied Science in Solar

Technology

Hughes, G. Edward/ Benson, Chris Contact:

(501) 762-1020

Students Taking or Completing Offering:

Solar Technician

Solar Related Courses

Solar Technology Cooperative Education Instructor: Benson, C.M.

Course Number:

(501) 762-1020

Department:

58970 Applied Science

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 6.0 hrs per week

Contact Hours:

Topics Covered Extensively: Plumbing Techniques; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Elec'l Generation, Central; Elec'l Generation, Small Scale; Process Heat, Agricultural; Process Heat, Industrial; Space Heating; Space Cooling

Number of Times Taught: 1 Average Enrollment:

Solar Technology I

Instructor:

Benson, C.M.

(501) 762-1020

Course Number: 580Ó3

Department: Applied Science

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Duration:

Freshman or Sophomore 15 Weeks, 3.0 hrs per week

Contact Hours: 45

Classroom: 45

Topics Covered Extensively: Appropriate Technology; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Solar Collector Evaluation/Design; Domestic Hot Water; Space Heating;

Space Cooling

Number of Times Taught: 1 Average Enrollment

Solar Technology I Lab.

Instructor:

Benson, C.M.

(501) 762-1020

Course Number: 58001

Department: Applied Science

Program or Curriculum: Solar Energy Technology Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 2.0 hrs per week 30

Contact Hours: Laboratory:

30 Topics Covered Extensively; Energy Storage; Materials. Research; Plumbing Techniques; Solar System Components; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating; Space Cooling

Number of Times Taught: 1 Average Enrollment:

Solar Technology II

Instructor:

Benson, C.M. (501) 762-1020

58203

Course Number: Department:

Student Level:

Applied Science

Program or Curriculum: Credits:

Solar Energy Technology

Freshman or Sophomore

Duration: 15 Weeks, 3.0 hrs per week

Contact Hours: Classroom: 45

Topics Covered Extensively: Energy Storage: Heat and Energy Transfer; Photovoltaics; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Elec'l Generation, Central; Elec'l Generation, Small Scale;

Space Heating; Space Cooling Number of Times Taught: 1 Average Enrollment:

Solar Technology II Lab.

Instructor: Benson, C.M.

(501) 762-1020

Course Number: 58201 Department:

Applied Science

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 2.0 hrs per week

Contact Hours: Laboratory:

Topics Covered Extensively: Materials Research; Photovoltaics; Plumbing Techniques; Solar System Components; Solar Systems Design; Solar Systems Testing and Evaluation; Elec'l Generation, Central; Elec'l Generation, Small

Scale; Space Cooling Number of Times Taught: 1 Average Enrollment:

Solar Technology III

Instructor: Benson, C.M.

(501) 762-1020 58403

Course Number:

Department: Applied Science

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 3.0 hrs per week

Contact Hours: 45 Classroom: 45

Topics Covered Extensively: Energy Storage; Photovoltaics; Plumbing Techniques; Solar Energy Policy Development; Solar Economics; Solar Systems Design; Domestic Hot Water; Elec'l Generation, Central; Elec'l Generation, Small Scale; Process Heat, Agricultural; Process Heat, Industrial; Space Heating; Space Cooling

Number of Times Taught: 1 Average Enrollment:

Solar Technology III Laboratory

Instructor: Benson, C.M.

(501) 762-1020

Course Number: 58401

Department: Applied Science

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 2.0 hrs per week

Contact Hours:

30

Laboratory: 30

Topics Covered Extensively: Energy Storage; Material Materials Research; Photovoltaics; Plumbing Techniques; Solar System Components; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Elec'l Generation, Central; Elec'l Generation, Small Scale; Process Heat, Agricultural; Process Heat, Industrial; Space Heating; Space Cooling

Number of Times Taught: 1 Average Enrollment:

Solar Topics

Instructor: Benson, C.M.

(501) 762-1020

Course Number: 58700

Department: Applied Science

Program or Curriculum: Solar Energy Technology

Credits:

Student Level:

Freshman or Sophomore

Duration:

15 Weeks, 2.0 hrs per week

Contact Hours: Classroom:

30 15 15

Laboratory: Topics Covered Extensively: Energy Storage; Photovoltaics; Plumbing Techniques; Solar Energy Policy Development; Solar System Components; Solar Economics; Solar Home Construction; Solar Law/Legislation; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems

Testing and Evaluation Number of Times Taught: 1 Average Enrollment:

CALIFORNIA

Antioch University West [90520]

650 Pine Street

San Francisco, California 94108

Programs and Curricula

*Solar Energy and Design

Contact:

Degree:

BA, MS, Environmental Studies and

Appropriate Technology Nelson, Lynn

(415) 956-1688

Solar Related Courses

*Courses in Design; Construction of Solar Systems

Instructor: Olkowski, Helga Department: Farallones Institute

Program or Curriculum: *Solar Energy and Design

Topics Covered Extensively: Passive Solar Technology; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Space

Heating; Space Cooling

Cabrillo College [1124]

Aptos, California 95003

(408) 425-6000

Programs and Curricula

Solar Technology

Degree: Contact: AD, Science

Burton, Dave (408) 425-6304

Students Taking or Completing Offering:

Solar Technician

Solar Related Courses

Alternate Energy Systems (Solar Technology)

Course Number: Dopartment:

CET60ABCD Indust. - Elect. Tech.

Program or Curriculum: Solar Technology

Credits:

Student Level: Duration:

All Levels

16 Weeks, 15.0 hrs per week Contact Hours: 240

Classroom: Laboratory:

160 Topics Covered Extensively: Alternate Energy Sources; Materials Research; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation

Applications of Solar Energy in Agriculture

Course Number: CET61

Program or Curriculum: Solar Technology Credits:

Student Level:

All Levels

Duration:

16 Weeks, 5.0 hrs per week

Contact Hours: Classroom:

80 32

Laboratory: 48

Topics Covered Extensively: Biomass Conversion; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Passive Solar Technology; Solar

System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Process Heat, Agricultural

Solar Architecture

Course Number: CET62

Program or Curriculum: Solar Technology

Credits:

Student Level: All Levels

Duration: 16 Weeks, 5.0 hrs per week

Contact Hours: 80 Classroom: 32 Laboratory: 48

Topics Covered Extensively: Energy Conservation; Passive Solar Technology; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar

Systems Design; Space Heating

Solar Electronics

Course Number: CET53

Department: Indus. - Elect. Tech. Program or Curriculum: Solar Technology

Credits: 2

Student Level: All Levels

Duration: 16 Weeks, 3.0 hrs per week

Contact Hours: 48

Topics Covered Extensively: Photovoltalcs; Solar System Components; Domestic Hot Water; Elec'l Generation,

Central; Elec'l Generation, Small Scale

Solar Energy In Agriculture

Course Number: CET54

Program or Curriculum: Solar Technology

Credits:

Student Level: All Levels

Duration: 16 Weeks, 4.0 hrs per week

Contact Hours: 64
Classroom: 32
Laboratory: 32

Topics Covered Extensively: Biomass Conversion; Intro. to Solar Energy; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Process Heat, Agricultural; Space Heating

Solar Energy in Building Design

Course Number: CET52

Department: Industrial - Electrical Technology

Program or Curriculum: Solar Technology

Credits:

Student Level: All Levels

Duration: 16 Weeks, 4.0 hrs.per week

Contact Hours: 64

Topics Covered Extensively: Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Design

Solar Energy Technology and Fabrication

Course Number: CET50ABCD

Department: Industrial - Electrical Technology

Program or Curriculum: Solar Technology

Credits:

Student Level: All Levels

Duration: 16 Weeks, 12.0 hrs per week

Contact Flours: 192 Laboratory: 192

Topics Covered Extensively: Solar System Components; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating

Solar Retrofitting and Weatherizing

Course Number: CET51

Department: Industrial - Electrical Technology

Program or Curriculum: Solar Technology

Credits:

Student Level: All Levels

Duration: 16 Weeks, 3.0 hrs per week

Contact Hours: 48

Topics Covered Extensively: Energy Conversion; Energy

Storage; Solar Collector Evaluation/Design; Solar Systems

Design; Solar Systems Installation

California State University-Sonoma [1156]

Rohnert Park, California 94928

(707) 664-2880

Programs and Curricula

Solar Energy Technical Training Program

Degree: Contact: Certificate Roy Irving

Students Taking or Completing Offering:

Solar Technician

Solar Related Courses

Independent Studies in Solar Energy

Instructor: Roy Irving (707) 664-2577

Course Number ENSP 337D
Program or Curriculum: Solar Energy Technician

Training Program

Credits:

Student Level: Junior or Senior

Duration: 15 weeks, 12 hrs per week

Contact Hours: 180
Independent Study: 180
Number of Times Taught: 2
Average Enrollment: 20

Solar Energy, Direct Uses

Instructor: Roy Irving

(707) 664-2577 Course Number ENSP 337

Program or Curriculum: Solar Energy Technical

Training Program

Credits

Student Level: Junior or Senior

Duration: 15 weeks, 3 hrs per week

Contact Hours: 45

Classroom: 45

Topics Covered Extensively: Alternate Energy Sources; Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Solar System Components; Domestic Hot Water; Space Heating

Number of Times Taught: 14 Average Enrollment: 35

Advanced Solar Energy Seminar

Instructor: Roy Irving (707) 664-2577

Course Number ENSP 437

Program Curriculum: Solar Energy Technical

Training Program

Uredits:

Student Level: Junior or Senior

Duration: 15 weeks, 3 hrs per week

Contact Hours: 45 Classroom: 45

Topics Covered Extensively: Heat and EnergyTransfer; Passive Solar Technology; Solar Economics; Solar Law/Legislation; Solar System Design; Domestic Hot Water; Space Heating

Number of Times Taught: 1 Average Enrollment: 28

Center for Employment Training [90350]

425 So. Market St.

San Jose, California 95113

Solar Related Courses

*Building Maintenance

Instructor: Rodriguez, Rudolph

Duration: 6 Weeks

Topics Covered Extensively: Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation

Cerro Coso Community College [10111]

Ridgecrest, California 93555 (714) 375-5001

Programs and Curricula

*Solar Engineering Technology

AD, Applied Science - Solar

Engineering Technology

Contact:

Dodge, Dick (714) 375-5001

Students Taking or Completing Offering:

Solar Technician

Chaffey College [1163]

Alta Loma, California 91701

(714) 987-1737

Solar Related Courses

*Solar Energy I

Instructor:

Rothwell, Robert

Course Number:

507

Department:

Indus. Tech.

Duration:

12 Weeks, 6.0 hrs per week

Contact Hours:

Topics Covered Extensively: Intro. to Solar Energy; Passive Solar Technology; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Domestic Hot Water, Swimming Pool Heating; Space Heating; Space Cooling

*Solar Energy II

Instructor:

Rothwell, Robert

Course Number:

508

Department: Duration:

Indus. Tech. 12 Weeks, 6.0 hrs per week

Topics Covered Extensively: Energy Conversion; Energy Storage; Heat and Energy Transfer; Photovoltaics; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation

[29027] Coastline Community College

Fountain Valley, California 92708 (714) 963-0811

Programs and Curricula

*Solar Technician

Students Taking or Completing Offering: Solar Technician

Solar Related Courses

*Solar Seminar

*Ten Courses in Energy Management

Program or Curriculum: Solar Technician

Cosumnes River College

Sacramento, California (916) 421-1000

Programs and Curricula

Environmental Design-Introduction to Solar Energy Systems

Degree:

AD, Environmental Design

[7536]

Contact: Papousek, Connie Students Taking or Completing Offering: Installer-

Residential (Solar System); Installer-Commercial (Solar System); Solar Technician

Solar Related Courses

ED47, Alternate Energy Systems

Instructor:

House, Harold

Course Number:

3108-01

Department:

Environmental Design

Program or Curriculum: Envir. Des. - Intro. Sol.

Ener. Systems

Credits:

Duration:

8 Weeks, 3.0 hrs per week

Contact Hours:

24

Classroom: 24

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Intro. to Solar Energy; Photovol-

Number of Times Taught: 3 Average Enrollment:

Intro. to Solar Energy Systems Instructor: House, Harold

Course Number: **ED31**

Environmental Design Department: Program or Curriculum: Envir. Des. - Intro. Sol.

Ener. Systems

Credits:

Duration:

4 Weeks, 16.0 hrs per week

Contact Hours: 65 Classroom: 48 Laboratory: 16

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Solar System Components; Solar Home Con-

struction, Solar Collector Evaluation/Design; Solar Systems Design; Space Heating; Space Cooling

Residential Energy Conservation

House, Harold Instructor:

Course Number: 3105-01

Department: Environmental Design Program or Curriculum: Envir. Des. - Intro. Sol.

Ener. Systems

Credits:

Duration: 3 Weeks, 8.0 hrs per week

Contact Hours: 24 Classroom: 24

Topics Covered Extensively: Appropriate Technology; Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Marketing/Market Analysis; Passive Solar Technology; Solar Home Construction; Solar Systems Design; Domestic Hot Water; Space Heating;

Space Cooling

Number of Times Taught: 3 Average Enrollment:

Evergreen Valley College

[12452]

San Jose, California 95121 (408) 274-7900

Programs and Curricula

*Solar Technician

Students Taking or Completing Offering: Solar Technician

Solar Related Courses

*Solar and Energy Seminar

*Solar House

*Two Courses on Solar

Program or Curriculum: *Solar Technician

Long Beach City College

[1219]

Long Beach, California 90808

(213) 420-4111

Programs and Curricula

*Air Conditioning and Refrigeration

Solar Related Courses

*Solar Segment

Air Cond. & Refrig. Department: Program or Curriculum: *Air Cond. & Refrig.

Modesto Junior College [1240]

Modesto, California 95350

(209) 526-2000

Programs and Curricula

External - Project Sunrise

Contact: Wilson, E. William

(209) 526-2000

Solar Related Courses

Solar Energy Applications

Wilson, E. William Instructor: (209) 526-2000

Course Number: PS368

Department: -Dept. Engineering, Physicial

Science and Mathematics

Program or Curriculum: External - Project Sunrise

Credits:

Student Level: All Levels

Duration: 16 Weeks, 3.0 hrs per week

Contact Hours: 48 Classroom: 42 Laboratory:

Topics Covered Extensively: Alternate Energy Sources; Energy Conservation; Energy Storage; Passive Solar Technology; Solar System Components; Solar Economics; Solar Home Construction; Domestic Hot Water; Space Heating; Space Cooling; Wind Power, Small Systems

Number of Times Taught: 4 35 🔨 Average Enrollment:

Monterey Peninsula College [1242]

Monterey, California 93940

(408) 649-8000

Programs and Curricula

Solar Collector Fabrication

Degree: Certificate-Solar Collectors

Contact: Owen.Patrick

(408) 649-1150

Solar Related Courses

Introduction to Solar and Alternate Energy Sources

Dick Lee Instructor:

(408) 649-8000 Course Number: 30295-40

Department: Engineering Program or Curriculum: Solar Collector

Fabrication

Credits:

Student Level: All Levels

Duration:

18 weeks, 3 hrs per week

Contact Hours:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conversion; Energy Storage; Passive Solar Technology; Photovoltaics; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating; Space Cooling

Number of Times Taught: 3 Average Enrollment:

Mount San Antonio College [1245]

Walnut, California 91789

(714) 598-2811

Programs and Curricula

Air Conditioning, Heating and Ventilation

AD, Air Conditioning, Heating Degree:

and Refrigeration

Contact: Dillon, Clifford

(714) 594-5611

Students Taking or Completing Offering:

Electrician, Solar Technician, Installer-Residential (Solar System), Installer-Commercial (Solar System), Plumber

Solar Related Courses

Solar and Alternate Energy Sources

Instructor: Bormann, Jay

(714) 594-5611

Course Number: 70

Department: Electronics

Program or Curriculum: Air Cond., Heat., and Vent.

Credits:

Freshman or Sophomore Student Level: Duration: 18 Weeks, 3.0 hrs per week

Contact Hours: 54 Classroom: 54

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Heat and Energy Transfer; Intro. to Solar Energy; Plumbing Techniques; Solar System Components; Solar Economics; Solar Systems Installation; Solar Systems Maintenance; Solar

Systems Testing and Evaluation; Space Heating

Solar Energy Systems Installation

Instructor: Bormann, Jay

(714) 594-5611

71/71L Course Number: Department: Electronics

Program or Curriculum: Air Cond., Heat., and Vent.

Credits:

Student Level: Freshman or Sophomore Duration: 18 Weeks, 6.0 hrs per week

Contact Hours: 108 Classroom: 54 Laboratory: 54

Topics Covered Extensively: Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar

Systems Testing and Evaluation

Office of Appropriate Technology [90530]

1530 10th Street

Sacramento, California 95814

Programs and Curricula

*Training Program for Installers

Jan Philbin Contact:

(916) 445-1803

Students Taking or Completing Offering: Installer-Residential (Solar System), Installer-Commercial (Solar System)

[1185] Redwoods, College of the

Eureka, California 95501

(707) 443-8411

Solar Related Courses

Solar Heating A

Instructor: Mills, David (707) 443-8411 Course Number: ENSC 20A Department: Env. Sci.

Credits:

Student Level: All levels

Duration: 12 Weeks, 1.0 hrs per week

Contact Hours: 12

Classroom: 12

Topics Covered Extensively: Alternate Energy Sources; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Photovoltaics; Passive Solar Technology; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating

Number of Times Taught: 1 Average Enrollment:

Solar Heating B

Instructor:

Mills, David (707) 443-8411

Course Number: Department:

ENSC 20B Env. Sci.

Credits:

Student Level:

All levels

Duration: Contact Hours: 12 Weeks, 1.0 hrs per week

Classroom:

12 12

Topics Covered Extensively: Alternate Energy Sources; Energy Conservation; Energy Conversion; Energy

Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Photovoltaics; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation: Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating

Number of Times Taught: 1 Average Enrollment:

Solar Heating C

Instructor:

Mills, David

(707) 443-8411

Course Number:

ÈNSC 20C

Department:

Env. Sci.

Credits: Student Level:

All levels

Duration:

12 Weeks, 1.0 hrs per week

Contact Hours:

12

Classroom:

12

Topics Covered Extensively: Alternate Energy Sources; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Photovoltaics; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installations; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating

Number of Times Taught: 1 Average Enrollment:

San Diego Community College — City College

San Diego, California 92101 (714) 238-1181

[8895]

Programs and Curricula

*Solar Energy, Maintenance and Technology AD, Advanced Degree

Solar Related Courses

*Two Courses on Solar Energy Maintenance, Technology Program or Curriculum: *Solar Ener. Maint, and Tech.

Topics Covered Extensively: Solar System Components; Solar Economics; Solar Collector Evaluation/Design: Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation

San Diego Community College — Evening College [7478]

San Diego, California 92101 (714) 238-1181

Programs and Curricula

Air Conditioning, Heating, Refrigeration & Solar Heating Technology

Degree:

AD, OTHER, Air Conditioning &

Heating, Refrigeration & Solar

Technology

Contact:

Belker, Loren (714) 238-1811

Students Taking or Completing Offering: Solar Technician, Trade Specialty

Solar Related Courses

Advanced Solar Service Maintenance & Technology

Instructor:

Faris, Theodore City Campus

Department: Program or Curriculum: Air Cond. Heat.,

Refrig. and Sol. Tech.

All levels

Student Level: Duration: 18 Weeks, 3.0 hrs per week

Contact Hours: 54

Topics Covered Extensively: Appropriate Technology; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Plumbing Techniques; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water; Swimming Pool

Heating; Space Heating Number of Times Taught: 3

Air Conditioning, Heating, Refrigeration and Solar Energy

Instructor:

Faris, Theodore (714) 238-1181

Course Number:

201

Department:

City Campus Program or Curriculum: Air Cond., Heat., .

Refrig., and Sol. Tech.

Credits:

Student Level:

Duration:

18 Weeks, 6.0 hrs per week

Contact Hours: 108 Classroom: 54 Laboratory: 54

Topics Covered Extensively: Appropriate Technology; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Plumbing Techniques; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water; Swimming Pool Heating; Space Heating

Number of Times Taught: 3 Average Enrollment:

Solar Service Maintenance and Technology

Instructor:

Faris, Theodore

Course Number:

(714) 238-1181

225 City Campus

Department: Program or Curriculum: Air Cond., Heat.,

Refrig., and Sol. Tech.

Credits:

Student Level:

All levels

Duration:

18 Weeks, 3.0 hrs per week 54

Contact Hours:

Topics Covered Extensively: Appropriate Technology; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Plumbing Techniques; Solar System Components: Solar Home Construction: Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water; Swimming Pool Heating; Space Heating

Number of Times Taught: 3 Average Enrollment:

San Jose City College [1282]

San Jose, California 95128 (408) 298-2181

Programs and Curricula

*Solar Technician

Degree:

AD, Science

Herrick, Clyde N./Upton, Si

Students Taking or Completing Offering:

Solar Technician

*Solar Technician

OTHER, Certificate of Achievement Degree:

Herrick, Clyde/Upton, Si Contact:

Students Taking or Completing Offering:

Solar Technician

Solar Related Courses

*Solar Energy — Industrial Applications

Instructor:

Upton, Si

Course Number:

SOL 114

Department:

Solar Technology

Program or Curriculum: *Solar Technician

Credits:

*Solar Energy — Residential Applications

Instructor: Course Number: Upton, Si

SOL 113

Department:

Solar Technology

Program or Curriculum: *Solar Technology

Credits:

*Solar Photoelectric Conversion

Instructor

Upton, Si

Course Number:

SOL 116

Department:

Solar Technology

Program or Curriculum: *Solar Technician Credits:

2

*Solar Theory

Instructor:

Unton, Si

Course Number:

PHYSCI21 Program or Curriculum: *Solar Technician

Credits:

3

Solar Technician Training Program Office of Appropriate Technology [90340]

1322 "O" Street

Sacramento, California 95814

Programs and Curricula

*Solar Technician Training Program

Contact:

Trujillo, JoAnn (916) 322-7190

Students Taking or Completing Offering:

Solar Technician

Solarcon

PO Box 14875

San Francisco, California 94114

Solar Related Courses

*Installers Workshop

(415) 648-2159

Department:

Karellen Educational

Services

F904901

Topics Covered Extensively: Solar Systems Installation

COLORADO

Colorado Technical College [10148]

Colorado Springs, Colorado 80907

(303) 598-0200

Programs and Curricula

Solar Engineering Technology

Degree:

BS, AD, Applied Science

Contact:

Christensen, Edward

(303) 598-0200

Students Taking or Completing offering:

Solar Engineer, Solar Technician

Solar Related Courses

Associate Seminar

Instructor:

Christensen, Edward

(303) 598-0200

Course Number:

SOL 250

Solar Engineering Technology Program or Curriculum: Solar Engineering Technology

Department: Credits:

Instructor:

Student Level:

Freshman or Sophomore

Student Level: Duration:

11 Weeks, 1.0 hrs per week

Contact Hours: Topics Covered Extensively: Alternate Energy Sources

Directed Practice

Christensen, Edward

Course Number:

(303) 598-0200

SOL 299

Department:

Solar Engineering Technology Program or Curriculum: Solar Engineering Technology

Credits:

Freshman or Sophomore 11 Weeks, 6.0 hrs per week

Duration: Classroom: Number of Times Taught:14

Average Enrollment:

Introduction to Energy

Instructor:

Sabo, Julius J. (303) 598-0200

Course Number:

SOL 100

Department:

Solar Engineering Technology Solar Engineering Technology

Program or Curriculum: Credits:

Student Level: All levels

11 Weeks, 3.0 hrs per week Duration:

Contact Hours:

Classroom: 33

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology Number of Times Taught: 10

Solar Design I

Average Enrollment.

Instructor:

Christensen, Edward

(303) 598-0200

Course Number: SOL 220

Dopartmont:

Solar Engineering Technology Program or Curriculum: Solar Engineering Technology

66

22

Credits:

Student Level: Duration:

Freshman or Sophomore 11 Weeks, 6.0 hrs per week

Contact Hours: Classroom:

Laboratory: 44 Topics Covered Extensively: Heat and Energy Transfer; Solar System Components; Solar Collector Evaluation/Design;

Solar Systems Design; Space Heating

Number of Times Taught: 9 Average Enrollment:

Solar Design II

Instructor:

Christensen, Edward (303) 598-0200

Course Number:

SOL 221

Department: Program or Curriculum:

Solar Engineering Technology Solar Engineering Technology

Credits: Student Level:

Freshman or Sophomore 11 Weeks, 6.0 hrs per week 66

Duration: Contact Hours: Classroom:

22 44

Laboratory: Topics Covered Extensively: Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design;

Domestic Hot Water; Space Heating

Number of Times Taught: 9

Denver, Red Rocks Campus, [9543] Average Enrollment: Community College of **Basic Solar Systems** Golden, Colorado 80401 Hilton, Craig Instructor: (303) 988-6160 (303) 988-6161 Course Number: **SOM 220 Programs and Curricula** Department: Industrial Occupations Solar Energy — Installation and Maintenance Program or Curriculum: Solar Energy-Inst. and Main. Degree: AD, OTHER, Solar Energy-Credits: Installation and Maintenance Student Level: All levels Contact: Hilton, Craig/Hilton, Robert Duration: 15 Weeks, 4.0 hrs per week (303) 988-6161 Contact Hours: 60 Students Taking or Completing Offering: Classroom: 15 Educator, Researcher, Installer-Residential (Solar System), Laboratory: 45 Plumber, Sheet Metal Worker Topics Covered Extensively: Alternate Energy Sources; Energy Conservation: Intro. to Solar Energy; Plumbing Solar Related Courses Techniques; Solar Home Construction; Solar Systems **Advance Solar Controls** Installation; Domestic Hot Water; Swimming Pool Heating; Instructor: Klima, John Space Heating (303) 988-6161 Number of Times Taught: 6 Course Number: SOM 236 Average Enrollment: Department: Industrial Occupations **Blueprint Reading For Construction Trades** Program or Curriculum: Solar Energy-Instal. and Main. Instructor: Feister, Clarence Credits: (303) 988-6161 Student Level: All levels Duration: 15 Weeks, 4.0 hrs per week Course Number: **BTR 125** Industrial Div. Department: Contact Hours: 60 Program or Curriculum: Solar Energy-Instal, and Main. Classroom: 30 Laboratory: 30 Credits: Student Level: All levels Topics Covered Extensively: Solar System Components; Solar Systems Testing and Evaluation: Domestic Hot Duration: 15 Weeks, 4.0 hrs per week Contact Hours: 68 Water; Swimming Pool Heating; Space Heating Number of Times Taught: 1 Classroom: 45 Laboratory: Average Enrollment: 23 Number of Times Taught: 20 Alternate Backup Systems for Solar Energy Average Enrollment: 20 Instructor: Hilton, Craig **Bricklaying For Construction Trades** (303) 988-6161 Course Number: **SOM 238** Instructor: Gale, Bud (303) 988-6161 Industrial Occupations Department: Course Number: **BRI 120** Program or Curriculum: Solar Energy-Instal, and Main. Department: Industrial Occupations Credits: Program or Curriculum: Solar Energy-Instal, and Main, Student Level: All levels Credits: Duration: 15 Weeks, 4.0 hrs per week Student Level: All levels Contact Hours: 60 Duration: 15 Weeks, 4.0 hrs per week Classroom: 30 Contact Hours: 60 Laboratory: 30 Classroom: 15 Topics Covered Extensively: Alternate Energy Sources Laboratory: 45 Basic Sheet Metal for Solar Energy Number of Times Taught: 8 Instructor: DuPriest, Don Average Enrollment: (303) 988-6161 Course Number: SHM 100 Carpentry for Construction Trades Hinz, Tim Instructor: Department: Industrial Occupations Program or Curriculum: Solar Energy-Instal, and Main. (303) 988-6161 Credits: Course Number: **CAR 120** Department: Industrial Occupations Student Level: All levels Duration: Program or Curriculum: Solar Energy-Instal, and Main. 15 Weeks, 4.0 hrs per week Credits: Contact Hours: ണ Classroom: 15 Student Level. All levels Duration: 15 Weeks, 4.0 hrs per week Laboratory: 45 Contact Hours: Topics Covered Extensively: Sheet Metal Techniques; Solar 60 System Components Classroom: Laboratory: 45 Number of Times Taught: 3 Topics Covered Extensively: Intro. to Solar Energy Average Enrollment: Number of Times Taught: 8 **Basic Solar Controls** Average Enrollment: Instructor: Hitz, Frank **Domestic Hot Water** (303) 988-6161 Instructor: Hilton, Craig Course Number:

Student Level:

Department:

SOM 235

Industrial Occupations

Program or Curriculum: Solar Energy-Instal, and Main.

Credits:

All levels

Duration: 15 Weeks, 4.0 hrs per week

Contact Hours: 60 Classroom: 15 Laboratory: 45

Topics Covered Extensively: Solar System Components;

Solar Systems Testing and Evaluation

Number of Times Taught: 2

Course Number:

Program or Curriculum:

Domestic Hot Water

Department:

Student Level:

Contact Hours:

Classroom:

Laboratory:

Credits:

Duration:

(303) 988-6161

Industrial Occupations

Solar Energy-Instal, and Main.

15 Weeks, 4.0 hrs per week

SOM 227

All levels

60

15

45 Topics Covered Extensively: Solar Systems Installation;

Topics Covered Extensively: Solar Systems Design; Domestic Number of Times Taught: 4 Hot Water; Swimming Pool Heating; Space Heating Average Enrollment: Number of Times Taught: 4 Hot Water Heating-Installation and Maintenance Average Enrollment: Instructor: Hilton, Robert (303) 988-6161 Solar Engineering Technology II PLU 206 Dahl, Mike Course Number: Instructor: (303) 988-6161 Industrial Occupations Department: Program or Curriculum: Solar Energy-Instal, and Main. Course Number: SOM 222 Credits. Industrial Occupations Department: Solar Energy-Inst. and Main. Student Level: All levels Program or Curriculum: Duration: 15 Weeks, 4.0 hrs per week Credits: All levels Contact Hours: 60 Student Level: Classroom: 15 Duration: 15 Weeks, 4.5 hrs per week Contact Hours: 68 Laboratory: 45 Topics Covered Extensively: Plumbing Techniques Classroom: 45 Number of Times Taught:25 Laboratory: 23 Topics Covered Extensively: Solar Economics; Solar Average Enrollment: Systems Design; Domestic Hot Water; Swimming Pool Introduction to Photovoltaic and Wind Energy Heating; Space Heating; Space Cooling (303) 988-6161 Number of Times Taught: 3 SOM 239 Course Number: -Average Enrollment: Industrial Occupations Department: Program or Curriculum: Solar Energy-Instal. and Main. Solar Panel Arrays Credits: Instructor: Hilton, Craig Student Level: All levels (303) 988-6161 15 Weeks, 4.0 hrs per week Duration: Course Number: SOM 226 Contact Hours: 60 Department: Industrial Occupations 30 Classroom: Program or Curriculum: Solar Energy-Instal. and Main. 30 Laboratory: Credits: Topics Covered Extensively: Alternate Energy Sources; Student Level: All levels Photovoltaics; Solar Systems Installation; Elec'l Generation, Duration: 15 Weeks, 4.0 hrs per week Small Scale, Wind Power, Small Systems Contact Hours: 60 Orientation of Tools, Basic Plumbing, and Drawing Classroom: 15 Hilton, Robert Instructor: Laboratory: 45 Topics Covered Extensively: Solar System Components (303) 988-6161 Course Number: **PLU 100** Number of Times Taught: 6 Department: Industrial Occupations Average Enrollment: Program or Curriculum: Solar Energy-Instal. and Main. Solar Panel Installations Credits: Instructor: Hilton, Craig Student Level: All levels (303) 988-6161 Duration: 15 Weeks, 4.0 hrs per week Course Number: **SOM 229** Contact Hours: Department: Industrial Occupations Classroom: 15 Program or Curriculum: Solar Energy-Instal, and Main. Laboratory: 45 Credits: Topics Covered Extensively: Plumbing Techniques Student Level: All levels Number of Times Taught: 25 Duration: 15 Weeks, 4.0 hrs per week Average Enrollment: Contact Hours: 60 Passive Solar Systems Classroom: 15 Shippee, Paul Instructor: Laboratory: 45 (303) 988-6161 Topics Covered Extensively: Solar Home Construction: Course Number: SOM 237 Solar Systems Installation Industrial Occupations Department: Solar System Design and Layout Program or Curriculum: Solar Energy-Instal, and Main. Instructor: Hilton, Craig Credits: (303) 988-6161 Student Level: All levels Course Number: SOM 225 Duration: 15 Weeks, 4.0 hrs per week Department: Industrial Occupations Contact Hours: ... 60 Program or Curriculum: Solar Energy-Instal. and Main. 30 Classroom: Crodito: 30 All levels Student Level: Topics Covered Extensively: Heat and Energy Transfer; Duration: Passive Solar Technology; Solar Systems Design; Space 15 Weeks, 4.0 hrs per week Heating Contact Hours: 60 Number of Times Taught: 1 Classroom: 15 Average Enrollment: Laboratory: 45 Solar Engineering Technology I Topics Covered Extensively: Solar Collector Evaluation/ Haugseth, Larry Instructor: Design; Solar Systems Design (303) 988-6161 Number of Times Taught: 6 Course Number: SOM 221 Average Enrollment: Industrial Occupations Department: Solar System Maintenance Program or Curriculum: Solar Energy-Instal, and Main. Instructor: Hilton, Craig Credits: (303) 988-6161 All levels Student Level: Course Number: . SOM 228 Duration: 15 Weeks, 4.5 hrs per week Department: Industrial Occupations

Credits:

Student Level:

Program or Curriculum: Solar Energy-Instal. and Main.

All levels

Contact Hours:

45

23

Classroom:

Laboratory:

Duration:

15 Weeks, 4.0 hrs per week

Contact Hours:

60 15

Classroom: Laboratory:

45

Topics Covered Extensively: Solar System Components;

Solar Systems Maintenance Number of Times Taught: 2 Average Enrollment:

Water Piping Methods

Instructor:

Hilton, Robert (303) 988-6161

Course Number:

PLU 107

Department:

Industrial Occupations

Program or Curriculum: Solar Energy-Instal, and Main. Credits:

Student Level: Duration:

All levels

Contact Hours:

15 Weeks, 4.0 hrs per week 60

Classroom: Laboratory: 15 45

Topics Covered Extensively: Plumbing Techniques

Number of Times Taught: 25 Average Enrollment:

Otero Junior College [1362]

La Junta, Colorado 81050 (303) 384-4443

Programs and Curricula

Architecture Technology — Solar Heating Option

Degree:

AD, Applied Science

Contact:

Nilsen, E. W. (303) 384-4443

Students Taking or Completing Offering: Solar Technician, Trade Specialty

Solar Related Courses

Architecture Technology — Solar Heating Option

Instructor:

Nilsen, E. W. (303) 384-4443

Construction & Manufacturing

Department:

Program or Curriculum: Arch. Tech. - Solar

Student Level:

Heating Option Freshman or Sophomore

Duration:

30 Weeks, 12.0 hrs per week

Contact Hours:

360

Topics Covered Extensively: Energy Storage; Intro. to Solar Energy; Solar System Components; Solar Economics; Solar Home Construction: Solar Collector Evaluation/ Design; Solar Systems Design; Solar Systems Installation;

Domestic Hot Water; Space Heating

Number of Times Taught: 0

CONNECTICUT

None

DELAWARE

Newcastle County Vocational Technical School

1417 Newport Rd.

[90370]

Wilmington, Delaware 19804

Programs and Curricula

*Solar Heating of Buildings

Solar Related Courses

*Solar Heating of Buildings

Program or Curriculum: *Solar Heating of Buildings

60 Contact Hours:

Topics Covered Extensively: Energy Conversion; Energy

Storage; Intro. to Solar Energy; Solar System

Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems

Testing and Evaluation

DISTRICT OF COLUMBIA

National Training Fund [90360]

1900 "L" Street NW, Suite 405,

Washington, District of Columbia 20036

Programs and Curricula

*Sheet Metal — Apprentice, Journeyman

Contact:

Harrington, Mr. David

(202) 833-9543

FLORIDA

Brevard Community College [1470]

Cocoa, Florida 32922

(305) 632-1111

Programs and Curricula

Solar Engineering Technology

AD, Applied Science - Solar Degree:

Engineering Technology

Contact:

Donnell, Nelson (305) 532-1111

Students Taking or Completing Offering:

Solar Technician

Florida Solar Energy Center [90100]

300 State Rd. 401

Cape Canaveral, Florida 32920

Solar Related Courses

*Short Courses, Workshops, Seminars

Gulf Coast Community College [1490]

Panama City, Florida 32401

(904) 769-1551

Programs and Curricula

Solar Energy Solar Systems Degree:

Contact:

AD, Science Jones, Robert C.

(904) 769-1551

Solar Related Courses

Solar Energy

Instructor:

Stotz, Robert/ Jones, Robert

(904) 769-1551

Course Number:

ETM-1101 Department: Tech. Ed. - A/C Heat, and Refrio.

Credits:

Program or Curriculum: Solar Energy Solar Systems

Student Level:

All levels

Duration: 17 Weeks, 3.0 hrs per week

Contact Hours:

Topics Covered Extensively: Solar System Components; Solar Home Construction; Solar Collector Evaluation/

Number of Times Taught: 1

Average Enrollment:

Solar Systems

Instructor: Stotz, Robert/ Jones, Robert

(904) 769-1551

Course Number:

Credits:

ETM 2102

Tech. Ed. - A/C Heat, and Refrig. Department:

Program or Curriculum: Solar Energy Solar Systems

Student Level: All levels

Duration: 17 Weeks, 3.0 hrs per week

Contact Hours:

51 Topics Covered Extensively: Heat and Energy Transfer;

Passive Solar Technology; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Domestic Hot Water; Space Heating; Space Cooling

Number of Times Taught: 1 Average Enrollment: 24

Miami-Dade Community College [1506]

Miami, Florida 33176 (305) 596-1211

Programs and Curricula

Air Conditioning Engineering Technology

Degree: AD, Science Contact: Succop, William (305) 685-4564

Students Taking or Completing Offering: Architect, Installer-Residential (Solar System), Installer-Commercial (Solar

System), Solar Technician

Solar Related Courses

Solar Energy Fundamentals

Cleland, George (305) 685-4206

ETM 2706

Course Number: Air Conditioning Engineering Department:

Technology

Program or Curriculum: Air Conditioning Engineering

Technology

Credits:

Student Level: High School Graduate Duration: 15 Weeks, 3.0 hrs per week 45

Contact Hours:

Instructor:

Topics Covered Extensively: Energy Conservation; Intro. to Solar Energy; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Economics; Solar Home Construction; Solar Systems Design; Solar Systems Installation; Domestic Hot Water; Swimming Pool Heating

Solar Energy Systems, Commercial

Instructor: Cleland, George (305) 685-4206

ÈTM 2758 C

Course Number: Department: Air Conditioning Engineering

Technology

Program or Curriculum: Air Conditioning Engineering

Technology

Credits:

Student Level: High School Graduate Duration: 15 Weeks, 4.0 hrs per week

Contact Hours: Classroom: 30 Laboratory: 30

Topics Covered Extensively: Energy Conservation; Intro. to Solar Energy; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Economics, Solar Home Construction; Solar Systems Design; Solar Systems Installation; Domestic Hot Water; Swimming Pool

Solar Energy Systems, Residential

Instructor: Cleland, George

(305) 685-4206

Course Number: ETM 2756C

Department: Air Conditioning Engineering

Technology

Air Conditioning Engineering Program or Curriculum:

Technology

Credits:

Student Level:

High School Graduate Duration: 15 Weeks, 4.0 hrs per week

Contact Hours: Classroom: 30 Laboratory: 30

Topics Covered Extensively: Energy Conservation; Intro. to Solar Energy; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Economics; Solar Home Construction; Solar Systems Design; Solar Systems Installaion; Domestic Hot Water; Swimming Pool Heating

Pensacola Junior College [1513]

Pensacola, Florida 32504 (904) 476-5410

Programs and Curricula

Solar Energy Technology

Degree: AD, Energy Technology —

Certificate of Completion

Contact: Lowery, Stanley

(904) 476-5410

Solar Related Courses

Department:

Residential Design and Installation

Lowery, Stanley Instructor:

(904) 476-5410 Industrial Technology Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 16 Weeks, 4.0 hrs per week

Contact Hours: Classroom: 32 Laboratory: 32

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Tochnology; Solar System Components; Solar Economics; Solar Home Construction: Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water; Swimming Pool Heating; Space Heating; Space Cooling

South Florida Technical Institute [90020]

201 W. Sunrise Blvd.

Ft. Lauderdale, Florida 33311

(305) 764-3432

Programs and Curricula

Energy Conversion Systems

Contact: Linne, William L.

(305) 764-3432

Students Taking or Completing Offering: Mechanical or Electrical Contractor, Installer-Residential (Solar System), Trade Specialty

Solar Related Courses

Air Conditioning, Refrigeration & Major Appliances

Instructor: Appleman, Louis

(305) 764-3432

Department: Training
Program or Curriculum: Energy Conversion Systems Student Level: High School Graduate Duration: 5 Weeks, 30.0 hrs per week

Contact Hours: 150 Classroom: 100 Laboratory: 50

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating; Space Cooling

Number of Times Taught: 3 Average Enrollment:

GEORGIA

Dekalb Community College [1562]

Clarkston, Georgia 30021 (404) 292-3994

Programs and Curricula

Solar Heating

Degree: Contact: Solar Heating Erickson, Glenn

(404) 292-1525

Students Taking or Completing Offering: Installer-Residential (Solar System), Solar Technician, Electrician, Plumber, Sheet Metal Worker

Solar Related Courses

Solar Heating

Instructor:

Penland, William D. (404) 292-1525

Department:

Heating/Air Conditioning

Program or Curriculum: Solar Heating Student Level:

All levels

Duration:

14 Weeks, 24.0 hrs per week 300

Contact Hours: Classroom: Laboratory:

200 100

HAWAII. IDAHO

None

ILLINOIS

Illinois Eastern Community College — [1742] **Olney Central College**

Olney, Illinois 62450 (618) 395-4351

Programs and Curricula

Construction Energy Program

Degree:

AD, Applied Science

Contact: Marrs, Steve

(618) 395-4351

Students Taking or Completing Offering: Installer-Residential (Solar System), Solar Technician

Solar Related Courses

Energy Conservation Theory

Instructor:

Culver, Ray (618) 395-4351

Course Number:

SCI 121

Department:

Physics

Program or Curriculum: Construction Energy Program

Credits:

Freshman or Sophomore

Student Level: Duration:

36

12 Weeks, 3.0 hrs per week

Contact Hours:

Classroom: 36

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Biomass Conversion; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Photovoltaics; Solar System Components; Solar Systems

Design

Energy Systems in Construction

Instructor:

Parish, William (618) 395-4351

Course Number:

COT 172

Department:

Construction Trades

Program or Curriculum: Construction Energy Program

Credits:

Student Level:

Freshman or Sophomore

Duration:

12 Weeks, 3.0 hrs per week .

Contact Hours: Classroom:

36 36

Topics Covered Extensively: Alternate Energy Sources: Appropriate Technology; Biomass Conversion; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology: Photovoltaics: Solar System Components: Solar Home Construction; Solar Collector Evaluation/ Design; Solar Systems Design; Domestic Hot Water; Wind Power, Central Systems: Wind Power, Small Systems

Number of Times Taught: 1 Average Enrollment:

Gas and Arc Welding

Instructor:

Jausel, Russ (618) 395-4351

Course Number:

ÀUM 282 Welding

Department: Program or Curriculum:

Construction Energy Program

Credits:

All levels

Student Level: Duration:

12 Weeks, 8.0 hrs per wek

Contact Hours: Classroom: 24 Laboratory: 72 Number of Times Taught: 3

Solar Store, Inc.

Average Enrollment:

[90030]

12

Box 841, Dept. bs Peoria, Illinois 61652 (309) 673-6402

Programs and Curricula

*Solar Energy Education for Installers

Contact:

Shanks, Diane

INDIANA

None

IOWA

Des Moines Area Community College [8735]

Ankeny, Iowa 50021 (515) 964-6200

Programs and Curricula

Solar Energy I and II

Degree:

Adult Ed.

Contact:

Rowe, Gordon N. (515) 964-6266

Solar Related Courses

Man and Energy

Instructor: Trumpy, Frank (515) 964-6292 Course Number: **PHYS 110**

Department: Credits:

Math/Science

Student Level: Duration:

Freshman or Sophomore 12 Weeks, 3.0 hrs per week

Contact Hours: Classroom:

Topics Covered Extensively: Alternate Energy Sources

Number of Times Taught: 9 Average Enrollment:

Solar Energy I — General Overview

Instructor:

Sidles, Paul (515) 206-6844

Course Number: Department:

BLDG: 519 Adult Ed.

13

Program or Curriculum: Solar Energy I and II

All levels Student Level:

Duration: 10 Weeks, 3.0 hrs per week

Contact Hours: 30 27 Classroom:

Topics Covered Extensively: Energy Conservation; Intro. to Solar Energy; Solar System Components; Solar

Economics; Solar Collector Evaluation/Design; Solar

Systems Design; Domestic Hot Water

Number of Times Taught: 7 Average Enrollment:

Solar Energy II - Air Systems

Hummell, Myron Instructor: (515) 239-6900 BLDG. 522 Course Number:

Adult Ed. Department:

Program or Curriculum: Solar Energy I and II

Student Level: All levels

10 Weeks, 3.0 hrs per week Duration:

Contact Hours: 30 27 Classroom:

Topics Covered Extensively: Appropriate Technology; Energy Conservation; Energy Storage, Heat and Energy Transfer; Sheet Metal Techniques; Solar System Components: Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Mainte-

nance: Space Heating Number of Times Taught: 2 Average Enrollment:

Muscatine Community College [1882]

Muscatine, Iowa 52761 (319) 263-8250

Programs and Curricula

Solar Carpentry

BS, Industrial Education Degree:

Melander, Harry Contact: (319) 263-8250

Students Taking or Completing Offering: Installer-Residential (Solar System)

Use of Solar Energy — Homeowners, Builders

Degree: Certificate of Completion

Contact: Ohlendorf, Vernon (319) 263-8250

Students Taking or Completing Offering:

Do-it-yourself Homeowner

Solar Related Courses

Solar Carpentry

Melander, Harry Instructor: (319) 263-8250

Trades Department:

Program or Curriculum: Solar Carpentry

Credits:

High School Graduate Student Level: 46 Weeks, 28.0 hrs per week Topics Covered Extensively: Energy Conservation; Energy Conversion; Passive Solar Technology; Domestic Hot

Water

Number of Times Taught: 1 Average Enrollment: 10

Use of Solar Energy — Homeowners, Builders

Ohlendorf, Vernon Instructor:

(319) 263-8250

Community Services-Cont. Ed. Department:

Program or Curriculum: Use of Solar Energy -

Homeowners, Builders

Student Level: All levels

10 Weeks, 3.0 hrs per week Duration:

Contact Hours: 20 Classroom: Laboratory: 10 Number of Times Taught: 2

Average Enrollment:

Scott Community College [4074]

Bettendorf, Iowa 52722

(319) 359-7531

Programs and Curricula

*Solar Energetics Technology AD, Solar Energetics Technology Degree:

(319) 359-7531

Students Taking or Completing Offering: Architect,

Researcher, Installer-Residential (Solar System), Installer-

Commercial (Solar System), Solar Technician

Solar Related Courses

*Courses: Installation, Repair — Heating, Refrigeration and

Air Conditioning

Program or Curriculum: *Solar Energetics Technology Topics Covered Extensively: Energy Storage; Photovoltaics; Plumbing Techniques; Sheet Metal Techniques; Solar System Components; Solar Collector Evaluation/ Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance, Solar Systems Testing and Evaluation; Domestic Hot Water; Process Heat, Industrial;

Space Heating; Space Cooling

Western Iowa Tech [7316]

Sioux City, Iowa 51102

(712) 276-0380

Programs and Curricula

Solar Systems Technology

AD, Applied Science in Solar Degree:

Systems Technology Contact: Chadwick, Richard

(712) 276-0380

Students Taking or Completing Offering: Installer-Residential (Solar System), Installer-Commercial (Solar

System), Solar Technician, Other

Solar Related Courses

Blueprint Reading

Instructor: Forsling, M. G. (712) 276-0380

Course Number: 274-3005

Department: Trades & Industry

Program or Curriculum: Solar Systems Technology

Credits:

Freshman or Sophomore Student Level: Duration: 12 Weeks, 5.0 hrs per week

Contact Hours: 60 Classroom: 36 24 Laboratory:

Topics Covered Extensively: Passive Solar Technology; Plumbing Techniques; Sheet Metal Techniques; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Elec'l

Generation, Small Scale; Space Heating

Average Enrollment:

Building Design for Solar Systems

Forsling, M. G. Instructor: (712) 276-0380 Course Number: 274-3010

Department: Trades & Industry

Solar Systems Technology Program or Curriculum:

Credits:

Freshman or Sophomore Student Level: 12 Weeks, 6.0 hrs per week Duration:

Contact Hours: 72 24 Classroom: Laboratory: 48

Topics Covered Extensively: Energy Conservation; Energy

Storage; Passive Solar Technology; Solar Home

Construction

Average Enrollment: 11 Integrated Solar Science II

Instructor: Forsling, M. G.

(712) 276-0380

Course Number:

274-3006

Department: Trades & Industry

Program or Curriculum: Solar Systems Technology

Credits:

Student Level: Freshman or Sophomore Duration: 12 Weeks, 5.0 hrs per week

Contact Hours: 72

Classroom: 48 Laboratory: 24

Topics Covered Extensively: Energy Conversion; Elec'l Generation, Small Scale; Space Heating; Space Cooling

Average Enrollment:

Introduction to Solar Systems

Instructor: Forsling, M. G.

(712) 276-0380 Course Number: 274-3000 Department: Trades & Industry

Program or Curriculum; Solar Systems Technology

Credits:

Student Level: Freshman or Sophomore Duration: 12 Weeks, 3.0 hrs per week

Contact Hours: 36 Classroom: 36 Average Enrollment: 11

Solar Feasability Cost Analysis

Instructor:

Forsling, M. G.

(712) 276-0380 274-3012

Course Number:

Department: Trades & Industry

Program or Curriculum: Solar Systems Technology

Credits: Student Level:

Duration: Contact Hours: 60

Freshman or Sophomore 12 Weeks, 5.0 hrs per week

Classroom: 60

Topics Covered Extensively: Solar Economics

Average Enrollment: 11

Solar Systems Applications I

Instructor: Forsling, M. G.

(712) 276-0380 Course Number: 274-3002

Department: Trades & Industry

Program or Curriculum: Solar Systems Technology

Credits:

Student Level: Freshman or Sophomore Duration: 12 Weeks, 13.0 hrs per week

Contact Hours: 156 Classroom: 60 Laboratory: 96

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer: Plumhing Techniques; Solar Collector

Evaluation/Design

Average Enrollment:

Solar Systems Applications II

Instructor: Forsling, M. G.

(712) 276-0380 Course Number: 274-3007

Department: Trades & Industry

Program or Curriculum: Solar Systems Technology

Credits:

Student Level: Freshman or Sophomore Duration: 12 Weeks, 11.0 hrs per week

Contact Hours: 132 Classroom: 60 72 Laboratory:

Topics Covered Extensively: Energy Conservation; Energy Conversion; Energy Storage; Plumbing Techniques; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Testing and Evaluation; Space Heating

Average Enrollment: Solar Systems Maintenance

Instructor:

Forsling, M. G.

(712) 276-0380

Course Number: 274-3013

Trades & Industry Department:

Program or Curriculum: Solar Systems Technology

Credits:

Freshman or Sophomore Student Level: 12 Weeks, 6.0 hrs per week Duration:

Contact Hours: Classroom: 24 48 Laboratory:

Topics Covered Extensively: Energy Storage; Solar System Components; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Space

Heating

Average Enrollment: Systems Design Engineering

Forsling, M. G. Instructor: (712) 276-0380

274-3011 Course Number: Department: Trades & Industry

Program or Curriculum: Solar Systems Technology

Credits:

Student Level: Freshman or Sophomore 12 Weeks, 8.0 hrs per week Duration:

Contact Hours: 96 48 Classroom: Laboratory: 48

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems

Testing and Evaluation Average Enrollment:

KANSAS

Barton County Community Junior College

Great Bend, Kansas 67530

[4608]

(316) 792-2701

Programs and Curricula

Solar Energy Technology

Degree: AD, Applied Science

Greer, Neil Contact:

(316) 792-2701

Students Taking or Completing Offering: Trade Specialty

Solar Related Courses

Solar Energy and Applied Science I.

Instructor Greer, Neil (316) 792-2701

Course Number: 6900 Department: Applied Sciences

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 17 Weeks, 6.0 hrs per week

Contact Hours: 102 Classroom: 51 Laboratory: 51

Topics Covered Extensively: Appropriate Technology; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Domestic Hot

Water; Space Heating Number of Times Taught: 1 Average Enrollment:

Kansas Technical Institute [4611]

Salina, Kansas 67401 (913) 825-0275

Programs and Curricula

Mechanical Engineering Technology — Solar Option

Degree: Contact:

AD, Science Ashburn, M. H. (913) 825-0275

Students Taking or Completing Offering: Solar Technician

Solar Related Courses

Solar System Design Technology I

Instructor:

Ashburn M (913) 825-0275

Course Number:

MT2832

Department:

Mechanical Technology Program or Curriculum: Mech. Engineering Tech. -

Solar Option

Student Level: Duration:

Freshman or Sophomore 16 Weeks, 4.0 hrs per week

Contact Hours: Classroom: 16 Laboratory: 48

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer: Intro. to Solar Energy; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation, Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating

Solar System Design Technology H

Instructor;

Ashburn, M. (913) 825-0275

Course Number:

MT2844

Department:

Mechanical Technology Program or Curriculum: Mech. Engineering Tech. -

Solar Option

Credits:

Student Level: Duration:

Freshman or Sophomore 16 Weeks, 8.0 hrs per week

Contact Hours: 42 Classroom: Laboratory: 86

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Economics; Solar Collector Evaluation/ Design; Solar Systems Design; Solar Systems Installation; Solar Systems Testing and Evaluation, Domestic Water Water; Space Heating

KENTUCKY, LOUISIANA

None

MAINE

Cornerstones, Wing School of Shelter [90090] Technology

54 Cumberland St. Brunswick, Maine 04011

Solar Related Courses

Advanced New House

Course Number:

Duration:

3 Weeks, 35.0 hrs per week

Contact Hours: 105

Topics Covered Extensively: Passive Solar Technology;

Solar Home Construction Passive Solar Building Design

(207) 729-0540

Course Number:

Ε

Duration:

1 Week, 35.0 hrs per week

Contact Hours: 35

Topics Covered Extensively: Passive Solar Technology;

Solar Home Construction

Passive Solar House Design & Construction

Instructor:

Wing, Charles (207) 729-0540 Course Number: Credits:

Student Level: All levels

Duration: 8 Weeks, 6.0 hrs per week

Contact Hours: 48 Classroom: 45

Topics Covered Extensively: Energy Conservation; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar

Technology; Solar Home Construction Number of Times Taught: 30

Average Enrollment: **Retrofitting Existing Structures**

(207) 729-0540

Course Number:

Duration: 3 Weeks, 35.0 hrs per week

Contact Hours:

Topics Covered Extensively: Alternate Energy Sources; Passive Solar Technology; Solar Home Construction

Solar Greenhouses

(207) 729-0540

Course Number:

Duration: 1 Week, 35.0 hrs per week

Contact Hours: 35

Topics Covered Extensively: Passive Solar Technology;

Solar Home Construction

The Design Workshop

Instructor:

Colburn, Gary (207) 729 0540

Topics Covered Extensively: Passive Solar Technology:

Solar Home Construction

Shelter Institute [90240]

58 Center Street Bath, Maine 04530

Solar Related Courses

*Passive Solar Design

Hennin, Patsy Instructor: (207) 443-7938

Duration: 15 Weeks

Topics Covered Extensively: Passive Solar Technology;

Solar Home Construction

MARYLAND

RETS Technical Center [90050]

511 Russell Street

Baltimore, Maryland 21230

(301) 727-6863

Programs and Curricula

Refrigeration Climate Control and Clean Air Degree: Refrigeration — Climate Control —

Clean Air

Tickler, Earl M.

(301) 727-6863

Students Taking or Completing Offering: Installer-Residential (Solar System), Solar Technician, Trade

Contact:

Solar Related Courses

Refrigeration — Climate Control — Clean Air

Instructor:

Tickler, Earl M. (301) 727-6863

Program or Curriculum: Refrig., Climate Control and

Clean Air

Student Level:

High School Graduate 6 Weeks, 30.0 hrs per week

Duration: Contact Hours: Classroom:

180 90

60 Topics Covered Extensively: Appropriate Technology; Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Plumbing Techniques; Solar Energy Policy Development; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Installation; Solar Systems Maintenance; Solar System Testing and Evaluation; Domestic Hot Water; Space Heating; Space Cooling

MASSACHUSETTS

The Cambridge School — Weston Center For Open Education [90200]

Weston, Massachusetts

Solar Related Courses

*Adapting Heating Systems for Solar Use

(617) 965-5428

Topics Covered Extensively: Space Heating

*Advanced Studies in Solar Heating

(617) 965-5428

Topics Covered Extensively: Space Heating

*Basic Solar Heating

(617) 965-5428

Topics Covered Extensively: Space Heating

*Biomass for Energy

(617) 965-5428

Topics Covered Extensively: Biomass Conversion

*Designing Your Own Solar System

(617) 965-5428

Topics Covered Extensively: Solar System Components; Solar Collector Evaluation/Design; Solar System Design; Space Heating

*Photovoltaics

(617) 965-5428

Topics Covered Extensively: Photovoltaics

*Power from the Sea

(617) 965-5428

*Small Wind Mills

(617) 965-5428

Topics Covered Extensively: Wind Power, Small Systems

*Solar Heating Added to Your House

(617) 965-5420

*Solar Heating System Design

(617) 965-5428

Topics Covered Extensively: Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Domestic Hot Water; Space Heating

*Wind Machines

(617) 965-5420

Topics Covored Extensively: Wind Power, Central Systems; Wind Power, Small Systems

Cape Cod Community College [2168]

West Barnstable, Massachusetts

(617) 362-2131

Programs and Curricula

Energy Systems Technology

Degree:

AD, Science

Contact:

Panitz, Ted

(617) 362-2131

Students Taking or Completing Offering: Solar Technician

Solar Related Courses

Energy Systems I-A Survey of Energy Alternatives

Instructor:

Panitz, Ted (617) 362-2131

Course Number:

Department:

TE 130

Industry Related Technology

Program

Program or Curriculum: Energy Systems Technology

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 4.0 hrs per week

Contact Hours: Classroom: 45 15

Laboratory: Topics Covered Extensively: Alternate Energy Sources

Number of Times Taught: 3 Average Enrollment:

Energy Systems II — Solar Energy I

Instructor: Panitz, Ted (617) 362-2131

Course Number:

TE 131

Department: Industry Related Technologies Program or Curriculum: Energy Systems Technology

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 4.0 hrs per week

Contact Hours: Classroom: 45 Laboratory: 15

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Domestic Hot Water; Space Heating

Number of Times Taught: 2 'Average Enrollment:

Energy Systems III — Solar Energy II

Instructor: Panitz, Ted

(617) 362-2131

Course Number:

TE 132

Department: Industry Related Technologies Program or Curriculum: Energy Systems Technology

Credits:

Student Level: Freshman or Sophomore 15 Weeks, 4.0 hrs per week Duration:

Contact Hours: 60 45 Classroom: Laboratory: 15

Topics Covered Extensively: Heat and Energy Transfer; Passive Solar Technology; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Domestic

Hot Water; Space Heating Number of Times Taught: 1 Average Enrollment:

New England Fuel Institute [90230]

20 Summer St. Box 888

Watertown, Massachusetts 02172

Solar Related Courses

*Basic Solar Heating Technology

Topics Covered Extensively: Space Heating

*Solar Installation and Maintenance

Tavino, R./ Taylor, R. Instructor:

(617) 924-1000 Student Level: All levels

Duration: 4 Weeks, 40.0 hrs per week

Contact Hours: 160

Classroom: 80 Laboratory: 80

Topics Covered Extensively: Solar System Components; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water; Space Heating

Northeast Institute of Industrial Technology

41 Phillips St. [90060] Boston, Massachusetts 02114

Programs and Curricula

Installing Solar Water Heaters

Degree. Solar Water Systems

Contact: Galvin, G. M.

(617) 523-2813

Solar Related Courses

Installing Solar Water Heating

Smith, Robert O./ Lannon, E. Instructor:

(617) 523-2813

Àir Conditioning, Refrig. Tech. Department: Program or Curriculum: Installing Solar Water Heaters

College Graduate Student Level:

15 Weeks, 2.0 hrs per week Duration:

Contact Hours: 30 Classroom: Number of Times Taught: 4 Average Enrollment:

Springfield Technical Community College

Springfield, Massachusetts

(413) 781-6470

Programs and Curricula

*Solar Energy Option

AD, Solar Energy Degree: Murray, Carl Contact: (413) 781-6470

Solar Related Courses

*Courses in Solar Technology

Eng'r. Tech Department:

Program or Curriculum: *Solar Energy Option

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Storage; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water, Space Heating

MICHIGAN

Charles S. Mott Community College [2261]

Flint, Michigan 48503 (313) 762-0200

Programs and Curricula

Energy Technology

AD, Applied Science, Alternate Degree:

Energy

Laine, Douglas E. Contact:

(313) 762-0278

Students Taking or Completing Offering: Trade Specialty

Solar Related Courses

Solar Heating and Cooling

Instructor: Laine, Douglas E. (616) 762-0278

PHYSCI-113 Course Number:

Department: Science and Mathematics Program or Curriculum: Energy Technology

Credits:

Student Level: All levels

16 Weeks, 2.0 hrs per week Duration:

Contact Hours: 32

32 Classroom:

Topics Covered Extensively: Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation

Number of Times Taught: 2 Average Enrollment:

Ferris State College [2260]

Big Rapids, Michigan 49307 (616) 796-9971

Programs and Curricula

Refrigeration, Heating and Air Conditioning Technology

Degree:

AD, Applied Science in Refria.. Heating, and Air Conditioning

Contact: Shane, James B.

(616) 796-9971

Students Taking or Completing Offering: Installer-Commercial (Solar System), Installer-Residential (Solar System), Solar Technician, Trade Specialty

Solar Related Courses

Advanced Air Conditioning

Instructor: Nott, Joe (616) 796-9971

Course Number: **RHA 263** Department: Construction

Program or Curriculum: Refrig., Heating and Air Condi-

tioning Technology

Credits:

Student Level: Freshman or Sophomore Duration: 10 Weeks, 20.0 hrs per week

Contact Hours: 200 Classroom: 50 Laboratory: 150 Average Enrollment: 18

Energy Conservation in Building Design

Kantor, Mel Instructor: (616) 796-9971

Course Number: A-D 302 Départment: Construction

Program or Curriculum: Refrig., Heating and Air Condi-

tioning Technology

Credits:

Student Level: All levels

Duration: 10 Weeks, 3.0 hrs per week

Contact Hours: 30 Classroom:

Topics Covered Extensively: Energy Conservation; Passive Solar Technology; Solar Home Construction; Space

Course Number:

Energy Use and Conservation

Erion, John Instructor:

(616) 796-9971 **BCT 302** Construction

Department:

Program or Curriculum: Refrig., Heating and Air Condi-

tioning Technology

Credits:

Student Level: All levels

Duration: 10 Weeks, 5.0 hrs per week

Contact Hours: 50 Classroom: 30 Laboratory: 20

Topics Covered Extensively: Alternate Energy Sources; Energy Conservation; Energy Conversion; Heat and Energy Transfer; Intro. to Solar Energy; Materials Research; Passive Solar Technology; Solar System Components; Solar Economics; Solar Systems Installa-

tion; Domestic Hot Water; Space Heating

Heating

Instructor: Stovens, Russ (616) 796-9971 Course Number: **RHA 262**

Department: Construction

Program or Curriculum: Refrig., Heating, and Air Condi-

tioning Technology

Credits:

Student Level: Freshman or Sophomore Duration: 10 Weeks, 20.0 hrs per week

Contact Hours: 200 Classroom: 50 Laboratory: 150

Topics Covered Extensively: Heat and Energy Transfer; Intro. to Solar Energy; Solar System Components; Solar Economics; Solar Systems Maintenance; Space Heating Average Enrollment:

Summer Air Conditioning

Lawrence, Fred/Shaw, Dick Instructor:

(616) 796-9971

Course Number:

RHA 261

Department:

Construction

Program or Curriculum:

Refrig., Heating and Air Condi-

tioning Technology

Student Level:

Freshman or Sophomore

Duration:

10 Weeks, 20.0 hrs per week

Contact Hours: Ciassroom: 50 Laboratory: 150

Topics Covered Extensively: Plumbing Techniques; Solar System Components; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evalua-

tion; Domestic Hot Water; Space Heating

Average Enrollment: 18

Grand Rapids Junior College [2267]

Grand Rapids, Michigan 49502 (616) 456-4895

Programs and Curricula

Architectural Drafting

Degree:

AD, Architectural Drafting

Contact: Boyer, Don

Students Taking or Completing Offering: Architect

Heating, Ventilation, & Air Conditioning

Degree:

AD, Heating, Ventilation, Air Cond.

Contact: Boyer, Don

Solar Related Courses

Solar Systems — Collector Design and Construction

Instructor:

Larson, L. (616) 456-4860

Course Number:

TE 245 Technology

Department:

Program or Curriculum: Arch. Draft. and Heat., Vent., A/C

Student Level: Duration:

Freshman or Sophomore 16 Weeks, 4.0 hrs per week

Contact Hours: Classroom: Laboratory:

64 16 32

Topics Covered Extensively: Materials Research; Plumbing Techniques; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Testing and Evaluation;

Domestic Hot Water; Space Heating

Solar Dwelling Design Concepts

Instructor:

Larson. L. (616) 456-4860

Course Number:

TE 243

Department:

Technology

Program or Curriculum: Arch. Draft. and Heat., Vent., A/C

Credits: Student Level:

Duration:

Freshman or Sophomore 16 Weeks, 4.0 hrs per week

Contact Hours:

Classroom:

32

Laboratory:

32

Topics Covered Extensively: Appropriate Technology; Energy Conservation; Energy Storage; Passive Solar Technology; Solar Home Construction; Domestic Hot

Water; Space Heating; Space Cooling

Solar Theory & Design

Instructor:

Larson, L.

Course Number:

(616) 456-4860

Department:

TE 142

Technology

Program or Curriculum: Arch. Draft. and Heat., Vent., A/C

Credits:

Student Level:

Freshman or Sophomore

Duration:

16 Weeks, 2.0 hrs per week

Contact Hours: 32 Classroom:

28 Laboratory:

Topics Covered Extensively: Energy Conversion; Intro. to Solar Energy; Domestic Hot Water; Space Heating

Number of Times Taught: 2 Average Enrollment: 15 Lansing Community College [2278]

Lansing, Michigan 48901

(517) 373-7400

Solar Related Courses

*Alternate Sources of Energy

Course Number:

ATG150

Department: Eng'r Tech.

Topics Covered Extensively: Alternate Energy Sources

*Building a Solar Furnace

Course Number:

ATG151

Department: Eng'r Tech.

Topics Covered Extensively: Space Heating

*Building a Solar Water Heater

Course Number: Department:

Eng'r Tech.

Topics Covered Extensively: Domestic Hot Water

*Passive Solar Design

Course Number:-

AT211

Department: Eng'r Tech.

Topics Covered Extensively: Passive Solar Technology

*Passive Solar II

Course Number:

AT215

Department: Eng'r Tech.

Topics Covered Extensively: Passive Solar Technology

*Principles of Solar Energy Collection

Course Number: AT201

Department: Eng'r Tech.

Topics Covered Extensively: Solar System Components;

Solar Collector Evaluation/Design

*Residential Solar Heating System Design

Course Number:

AT203

157

[12586]

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Department: Eng'r Tech.

Topics Covered Extensively: Solar System Components; Solar Home Construction; Solar Collector Evaluation/

Design; Solar Systems Design; Space Heating

*Solar Housing Course Number: AT200 Department: Eng'r Tech.

*Solar Site Seminar Course Number: AT208 Department: Eng'r Tech.

MINNESOTA, MISSISSIPPI, MISSOURI, **MONTANA**

None

NEBRASKA

Metropolitan Technical Community College

Omaha, Nebraska 68137 (402) 457-5100

4.5

Programs and Curricula

Solar Technical Training Program

Dearee: Contact: Solar Systems Kafka, James J.

(402) 457-5100 Students Taking or Completing Offering: Solar Technician

Solar Related Courses

Survey of Solar Energy

Instructor:

Reinmuth, Larry

(402) 457-5100

Department: Continuing Education Program or Curriculum: Solar Technician Training Program

Student Level:

All levels

Duration: 8 Weeks, 2.5 hrş per week

Contact Hours:

20

Classroom:

12

Laboratory:

8

Topics Covered Extensively: Alternate Energy Sources; Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Photovoltaics; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating; Space Cooling; Wind Power, Small Systems

Number of Times Taught: 3 Average Enrollment:

NEVADA

Clark County Community College [10362]

Las Vegas, Nevada 89030 (702) 643-6060

Programs and Curricula

Solar Energy Technology

Degree: AD, OT, Solar Energy Technology

Applied Science

Contact: Comarow, David (702) 843-6060

Students Taking or Completing Offering: Solar Technician, Sheet Metal Worker, Electrician, Plumber

Solar Related Courses

Advanced Solar Energy Technology

Comarow, David Instructor: (702) 643-6060 Course Number: SOL 201 Department: Science

Program or Curriculum: Solar Energy Technology

Creditš:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 6.0 hrs per week

Contact Hours: Classroom: 45 Laboratory: 45

Topics Covered Extensively: Appropriate Technology; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Materials Research; Plumbing Techniques; Solar System Components; Solar System Components; Solar Economics; Solar Home Construction; Solar Law/Legislation; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating; Space Cooling

Introduction to Solar Technology

Comarow, David Instructor: (702) 643-6060

Course Number: **SOL 119** Department: Science

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 9.0 hrs per week

Contact Hours: 135 Classroom: 90 Laboratory: 45

Topics Covered Extensively: Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Plumbing Techniques; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation, Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating; Space Cooling

Passive Solar Heating and Cooling Technology

Instructor: Comarow, David (702) 643-6060

Course Number: -**SOL 130** Department: Science

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 3.0 hrs per week

Contact Hours: 45 Classroom: 45

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Passive Solar Technology; Solar Economics; Solar Home Construction; Space Heating; Space Cooling

Practicum in Solar Technology

Instructor: Comarow, David

(702) 043-G000

Course Number: SOL 1210 Department: Science

Solar Energy Technology Program or Curriculum:

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 9.0 hrs per week

Contact Hours:

Topics Covered Extensively: Domestic Hot Water; Swimming Pool Heating; Process Heat, Industrial, Space

Heating; Space Cooling

Course Number:

Solar Energy Technology — Home Owner

Comarow, David Instructor:

(702) 643-6060 **ENV 1183** Science

Department: Program or Curriculum: Solar Energy Technology

Student Level: All levels

Duration: 1 Week, 15.0 hrs per week

Contact Hours: 15 Classroom: 15

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating; Space Cooling

Number of Times Taught: 7

Average Enrollment:

NEW HAMPSHIRE

New Hampshire Vocational Technical College — Manchester [2582]

Manchester, New Hampshire (603) 668-6706

Programs and Curricula

Solar Energy Certificate Program

Degree: Solar Energy Contact: Magnon, David (603) 668-6706

Students Taking or Completing Offering: Educator,

Do-it-yourself Homeowner

Solar Related Courses

Energy Conservation — Principles

Instructor: Magnon, David (603) 668-6706 Course Number: M941EV

Evenina Program or Curriculum: Solar Energy Certificate Program

Credits:

Department:

Student Level: All levels

Duration: 12 Weeks, 3.0 hrs per week

Contact Hours: 36

Topics Covered Extensively: Energy Conservation

Number of Times Taught: 1 Average Enrollment:

Energy Survey & Alternative Systems

Instructor: Magnon, David

(603) 668-6706

Course Number: M940EV Department:

Evening

Credits:

Program or Curriculum: Solar Energy Certificate Program

Student Level:

All levels

Duration:

12 Weeks, 3.0 hrs per week

Contact Hours:

36

Topics Covered Extensively: Alternate Energy Sources:

Appropriate Technology; Energy Conservation; Intro. to Solar Energy; Passive Solar Technology

Number of Times Taught: 1

Average Enrollment: Principles of Solar Design

Instructor:

Magnon, David

(603) 668-6706

Course Number:

M943EV

Department:

Evening Extension

Program or Curriculum: Solar Energy Certificate Program

Credits:

Student Level:

All levels

Duration:

12 Weeks, 3.0 hrs per week

Contact Hours: 36

Topics Covered Extensively: Solar Home Construction; Solar Collector Evaluation/Design: Solar Systems Design

Solar Construction & Installation Technology

Instructor:

Magnon, David (603) 668-6706

Course Number:

M944EV

Department:

Evening Extension

Program or Curriculum: Solar Energy Certificate Program

Credits:

Student Level:

All levels

Duration:

12 Weeks, 4.0 hrs per week

Contact Hours:

48 Topics Covered Extensively: Solar Collector Evaluation/ Design; Solar Systems Design; Solar Systems Installation;

Solar Systems Maintenance

Solar Energy — a Prime Energy Resource

Instructor:

Magnon, David (603) 668-6706

Course Number:

M942FV

Department:

Evening Extension

Program or Curriculum: Solar Energy Certificate Program

Credits: Student Level:

All levels

Duration:

12 Weeks, 4.0 hrs per week .

Contact Hours:

48

Topics Covered Extensively: Alternate Energy Sources; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Solar System Components; Solar Collector Evaluation/Design; Space Heating

Solar Heating Systems

Instructor:

Byrne, E. 404

Course Number: Department:

HVAC

Credits:

All levels

Student Level:

Duration:

12 Weeks, 4.0 hrs per week

Contact Hours:

48

Topics Covered Extensively: Plumbing Techniques; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water;

Space Heating

Number of Times Taught: 4 Average Enrollment:

Solar Seminar — Integrated Projects

Instructor:

Magnon, David (603) 668-6706

Course Number:

M945EV

Department:

Program or Curriculum:

Evening Extension

Credits:

Solar Energy Certificate Program

Student Level:

All levels

Duration:

12 Weeks, 3.0 hrs per week

Contact Hours:

36

NEW JERSEY

Essex County Technical Careers Center [90390]

91 West Market St. Newark, New Jersey

Programs and Curricula

*Day Program — Solar Heating Systems

Certificate

*Night Program — Solar Heating Systems

Dearee:

Certificate

Solar Related Courses

*Solar Heating Systems — (Day Course)

Department:

Adult Education

Program or Curriculum: *Day Program — So. Heat. Systems

Contact Hours: 300

Topics Covered Extensively: Solar System Components; Solar Collector Evaluation/Design: Solar Systems Design: Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water, Space Heating, Space Cooling

*Solar Heating Systems — (Night Course)

Department:

Adult Education

Program or Curriculum: *Night Program — Sol. Heat.

Systems

120 Contact Hours:

Topics Covered Extensively: Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water; Space Heating; Space Cooling

Mercer County Area Vocational Technical Schools [90560]

1085 Old Trenton Rd.

Trenton, New Jersey 08690

Solar Related Courses

*Installing Solar Heating & Cooling

Plumbing, Heating, and Refrig. Department: Topics Covered Extensively: Plumbing Techniques; Solar System Components; Solar Systems Installation; Domestic

Ocean County Vocational Technical Schools [90380]

Route 571 Jackson, New Jersey 08527

Hot Water; Space Heating; Space Cooling

Programs and Curricula

*Solar Energy Theory-Heating, Ventilation, Air

Conditioning Technology

Degree: **Evening School Certificate**

Solar Related Courses

*Solar Energy Theory-Heating, Ventilation and

Air Conditioning

Department:

Program or Curriculum: *Sol. Ener. Theory - Heat., Vent.,

A/C Tech All levels Student Level:

15 Weeks Duration: Topics Covered Extensively: Solar System Components: Solar Collector Evaluation/Design; Solar Systems Design;

Evening School

Domestic Hot Water; Space Heating *Solar Energy Workshop

Department:

Evening School Student Level: All levels

Topics Covered Extensively: Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Domes-

Southern New Jersey OIC [90070]

Camden, New Jersey

Programs and Curricula

Solar Energy Unit Installer Program

Completion Certificate Degree: Contact: Keene, Joseph P.

(609) 944-2545

Students Taking or Completing Offering: Installer-Residential (Solar System)

Solar Related Courses

Solar Energy Installer

Keene, Joseph P. Instructor:

(609) 966-2545

Program or Curriculum: Solar Energy Unit Installer Program

High School Graduate Student Level: 26 Weeks, 5.0 hrs per week Duration:

130 Contact Hours:

Topics Covered Extensively: Appropriate Technology; Biomass Conversion; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Systems Installation; Domestic Hot Water; Swimming Pool Heating;

Space Heating

NEW MEXICO

None

NEW YORK

Adirondack Community College [2860]

Glens Falls, New York 12801

(518) 793-4491

Programs and Curricula

Seminar in Solar Energy

Heating Certificate Degree: Harrington, Charles Contact: (518) 747-0274

Students Taking or Completing Offering:

Solar Technician

Solar Related Courses

Seminar in Solar Energy

Harrington, Charles instructor:

(518) 747-0274

Course Number: **TECH 191**

Occ. Ed. Department:

Program or Curriculum: Seminar in Solar Energy

Credits: All levels Student Level:

Duration: 17 Weeks, 6.0 hrs per week

51

Contact Hours: 102 Classroom: 51

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/ Design: Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and

Evaluation; Domestic Hot Water; Space Heating;

Space Cooling

Laboratory:

Number of Times Taught: 5 Average Enrollment:

Cayuga County Community College [2861]

Auburn, New York 13021

(315) 253-7345

Programs and Curricula

Solar Energy Technology

Solar Energy Technology Degree: Contact: Komanecky, William

(315) 253-7345

Students Taking or Completing Offering: Do-it-yourself Homeowner, Electrician, Plumber

Solar Related Courses

Solar Heating Energy

Simkin, Robert Instructor: (315) 364-8065

Science Department:

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: All levels

Duration:

5 Weeks, 3.0 hrs per week

Contact Hours: 15 Classroom: 15

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Solar System Components; Space Heating

Number of Times Taught: 2 Average Enrollment:

CUNY New York City Community College [2696]

Brooklyn, New York 11201

(212) 643-4033

Programs and Curricula

Environmental Control Technology

AD, Applied Science Contact: Lomask, Samuel

(212) 962-0407

Solar Related Courses

Environmental Design I

Farkas, Stanley Instructor:

(212) 239-1662

Course Number: EC 110

Environmental Control Technology Department: Program or Curriculum: Environmental Control Technology

Credits:

Student Level: Freshman or Sophomore 15 Weeks, 3.0 hrs per week Duration:

Contact Hours:

Classroom: 45

Topics Covered Extensively: Energy Conservation; Heat

and Energy Transfer

Number of Times Taught: 70 Average Enrollment:

Environmental Design Laboratory

Instructor: Farkas, Stanley (212) 239-1662

Course Number: EC 111

Environmental Control Technology Department: Program or Curriculum: Environmental Control Technology

Credits:

Freshman or Sophomore Student Level: 15 Weeks, 3.0 hrs per week Duration:

Contact Hours: Classroom:

Topics Covered Extensively: Plumbing Techniques

Average Enrollment:

Environmental System Design Instructor: Finger, A.

(212) 239-1658 Course Number: EC 430

Department:

Environmental Control Technology Program or Curriculum: Environmental Control Technology

Credits:

Freshman or Sophomore Student Level: Duration: 15 Weeks, 6.0 hrs per week

Contact Hours: 90 Classroom: 30 Laboratory: 60 Number of Times Taught:16 Average Enrollment:

Hydronic Systems Design

Instructor: Pita, Edward

(212) 239-1662

Course Number: EC 220

Environmental Control Technology Department: Program or Curriculum: Environmental Control Technology

Credits:

Student Level: High School Graduate 15 Weeks, 4.0 hrs per week Duration:

Contact Hours: 60 Classroom:

Topics Covered Extensively: Heat and Energy Transfer

Number of Times Taught: 24 Average Enrollment:

Refrigeration II

Lomask, Samuel Instructor: (212) 239-1696

Course Number: **EC 410**

Department: **Environmental Control Technology** Program or Curriculum: **Environmental Control Technology**

Credits:

Student Level: Junior or Senior

Duration: 15 Weeks, 2.0 hrs per week

Contact Hours: 30

Topics Covered Extensively: Energy Conservation: Energy

Storage; Heat and Energy Transfer

Number of Times Taught: 16 Average Enrollment:

Mohawk Valley Community College [2871]

Utica, New York 13501 (315) 792-5500

Programs and Curricula

Solar Energy Technology

Solar Energy Technology Degree:

Contact: Dunning, Francis

(315) 792-5514

Solar Related Courses

Solar Energy I - Energy & Energy Construction

Dunning, Francis Instructor:

(315) 792-5514

Course Number: CC 530

Department: Physics and Engineering Science

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: All levels

Duration: 10 Weeks, 3.0 hrs per week

Contact Hours: 30 Classroom: 30

Topics Covered Extensively: Appropriate Technology; Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Solar System Components; Solar Economics; Solar Systems Installation; Domestic

Hot Water; Space Heating Number of Times Taught: 5 Average Enrollment:

Solar Energy II (Installation)

Instructor:

Dunning, Francis

(315) 792-5514

Course Number:

D2986

Department: **Physics**

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 10 Weeks, 5.0 hrs per week

Contact Hours: 50 30 Classroom: Laboratory: 20

Topics Covered Extensively: Appropriate Technology; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Plumbing Techniques; Solar System Components; Solar Economics; Solar Home Construction; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic

Hot Water; Space Heating Number of Times Taught: 1 Average Enrollment:

Solar III (Solar Energy System Design and Analysis)

Instructor: Dunning, Francis

(315) 792-5514

Department: **Physics**

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 10 Weeks, 5.0 hours per week

Contact Hours: 30 Classroom: Laboratory: 20

Topics Covered Extensively: Appropriate Technology: Energy Conversion; Energy Storage; Heat and Energy Transfer; Materials Research; Plumbing Techniques; Sheet Metal Techniques; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Testing and Evaluation; Domestic Hot Water, Swimming Pool Heating: Space

Heating; Space Cooling

Solar IV (Alternate Energy Sources)

Instructor: Dunning, Francis (315) 792-5514

Physics Department:

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 10 Weeks, 5.0 hrs per week

Contact Hours: 50 Classroom: 30 Laboratory: 20

Topics Covered Extensively: Alternate Energy Sources; Energy Conservation; Energy Conversion; Intro. to Solar Energy Passive Solar Technology; Photovoltaics; Solar Economics; Solar Law/Legislation; Process Heat, Agricul-

tural; Process Heat, Industrial; Wind Power; Central Systems; Wind Power, Small Systems

Solar System Fabrication I

Instructor: Dunning, Francis (315) 792-5514

Department: **Physics**

Program or Curriculum: Solar Energy Technology

Credits:

Student Level: Freshman or Sophomore Duration: 10 Weeks, 3.0 hrs per week

Contact Hours: Classroom: 10 Laboratory: 20

Topics Covered Extensively: Appropriate Technology; Plumbing Techniques; Sheet Metal Techniques; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation, Domestic Hot Water, Space Heating: Space Cooling

Solar System Fabrication II

Instructor: Dunning, Francis

(315) 792-5514

Department: **Physics**

Program or Curriculum: Solar Energy Technology

Credits: Student Level: Freshman or Sophomore

Duration: 10 Weeks, 7.0 hrs per week Contact Hours:

Classroom: 10 Laboratory: 60

Topics Covered Extensively: Appropriate Technology; Plumbing l'echniques; Sheet Metal Techniques; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water:

Space Heating; Space Cooling

SUNY Agricultural and Technical College - Delhi

Delhi, New York 13753

(607) 746-4111

Programs and Curricula

Construction Technology/Civil Technology

Contact:

Ad, Applied Science Duncan, George (607) 746-4225

Students Taking or Completing Offering:

Mechanical or Electrical Contractor, Contractor, Other

Solar Related Courses

General Chemistry

Onasch, Frederick Instructor:

(607) 746-4377

Course Number: 9512

Department: Physical Sciences

Program or Curriculum: Construction Tech./Civil Tech.

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 5.0 hrs per week

Contact Hours: Classroom: 30 45 Laboratory:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Biomass Conversion; Energy Conversion; Energy Storage; Heat and Energy Transfer;

Materials Research; Photovoltaics

General Chemistry 9513

Onasch, Frederick Instructor:

(607) 746-4377

9513 Course Number:

Department: **Physical Sciences**

Program or Curriculum: Construction Tech./Civil Tech.

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 5.0 hrs per week

Contact Hours: 30 Classroom: Laboratory: 45

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Biomass Conversion; Energy Conversion; Energy Storage; Heat and Energy Transfer

Material Research; Photovoltalcs

General Physics

Vetter, Willard Instructor: (607) 746-4374

Course Number: 9521

Physical Sciences Department:

Program or Curriculum: Construction Tech./Civil Tech.

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 4.0 hrs per week

Contact Hours: Classroom: 30 Laboratory:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer;

Intro. to Solar Energy

100 Average Enrollment:

General Physics 9522

Vetter, Willard Instructor: (607) 746-4374

9522 Course Number:

Department: Physical Sciences

Program or Curriculum: Construction Tech./Civil Tech.

Credits:

Duration:

Student Level:

Freshman or Sophomore 15 Weeks, 4.0 hrs per week

Contact Hours:

30 Classroom: Laboratory: 30

Topics Covered Extensively; Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer;

Intro. to Solar Energy Average Enrollment:

Mechanical Equipment for Buildings

Instructor: Hampel, John

(607) 746-4386

Course Number: 3741

Construction Technology Department: Program or Curriculum: Construction Tech./Civil Tech.

Credits:

Student Level: Freshman or Sophomore Duration: 15 Weeks, 4.0 hrs per week

Contact Hours: 60 Classroom: 45 Laboratory: 30

Topics Covered Extensively: Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer;

Plumbing Techniques Number of Times Taught: 20 Average Enrollment: 65

Thermodynamics and Heating

Instructor: Hampel, John (607) 746-4386

Course Number: 3711

Construction Technology Department: Program or Curriculum. Construction Tech./Oivil Tech.

Credits:

Student Level: Freshman or Sophomore 15 Weeks, 4.0 hrs per week Duration:

Contact Hours: 60 45 Classroom: Laboratory: 30

Topics Covered Extensively: Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer;

Plumbing Techniques Number of Times Taught: 20 Average Enrollment: 65

Water Resources

Instructor: Singer, Darrell

(607) 746-4391

Course Number: 3554

Department: Civil Technology

Program or Curriculum: Construction Tech./Civil Tech

Credits:

Student Level: Freshman or Sophomore 15 Weeks, 6.0 hrs per week Duration:

Contact Hours: 30 Classroom: Laboratory: 60

Topics Covered Extensively: Alternate Energy Sources; Biomass Conversion; Energy Conservation; Energy Con-

version; Energy Storage Number of Times Taught: 20 Average Enrollment:

NORTH CAROLINA

Cape Fear Technical Institute [5320]

Wilmington, North Carolina 28401 (919) 343-0481

Programs and Curricula

General Occupational Technologies

Degree: AD, General Occupational Technologies

Stiles, W. O./ Averette, R. Contact:

(919) 343-0481

Solar Related Courses

Introduction to Energy Resources

Bordeaux, Ralph Instructor:

(919) 343-0481

T-EGY101 Course Number:

Department: **Engineering Occupational** General Occupational

Program or Curriculum:

Credits:

All levels Student Level:

Duration:

11 Weeks, 3.0 hrs per week

Contact Hours:

33

Classroom: 33

Topics Covered Extensively: Alternate Energy Sources;

Energy Storage; Intro. To Solar Energy

Number of Times Taught: 2 Average Enrollment:

Introduction to Solar Energy Systems (Electricity)

Instructor:

Bordeaux, Ralph

Course Number:

(919) 343-0481 T-3GY103

Department:

Engineering

Program or Curriculum: General Occupational

Technologies

Credits:

Student Level: Duration:

All levels

Contact Hours:

11 Weeks, 6.0 hrs per week

Classroom: Laboratory:

44

Topics Covered Extensively: Appropriate Technology; Photovoltaics; Solar Energy Policy Development; Elec'l Generation, Small Scale; Wind Power, Small Systems

Introduction to Solar Energy Systems (Thermal)

Instructor:

Stiles, Warren O. (919) 256-3146

Course Number: Department:

T-EGY102 G.O.T./Evening

Program or Curriculum: General Occupational

Technologies

Credits:

Student Level:

All levels

Duration: Contact Hours: 11 Weeks, 6.0 hrs per week

Classroom: Laboratory:

44 22

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Solar Economics; Solar Collector Evaluation/

Design; Domestic Hot Water

Southwestern Technical Institute [8466]

Sylva, North Carolina 28779 (704) 586-4091

Programs and Curricula

Solar Energy Systems-Residential and

Commercial Construction

Degree:

Certificate of Completion

Contact:

Liming, Glenn (704) 586-4091

Students Taking or Completing Offering:

Installer-Residential (Solar System), Installer-Commercial

(Solar System), Solar Technician

Solar Related Courses

Introduction to Solar Concepts

Instructor:

Liming, Glenn (704) 586-4091

Course Number:

CAR 1120

Department:

Program or Curriculum:

Industrial/Vocational

Solar Energy Systems-Res. and Comm. Construction

Credits:

Student Level:

Freshman or Sophomore 11 Weeks, 6.0 hrs per week

Duration: Contact Hours: Classroom:

66 33 33

Laboratory: Number of Times Taught: 1

Average Enrollment: **Sular Collector**

Instructor:

Liming, Glenn (704) 586-4091 Course Number:

CAR 1121

Department: Industrial/Vocational

Program or Curriculum: Solar Energy Systems-Res. and

Comm. Construction

Credits:

Student Level: Duration:

Freshman or Sophomore

11 Weeks, 13.0 hrs per week

Contact Hours: 143 33

Classroom: Laboratory: 110

Topics Covered Extensively: Solar Collector Evaluation/ Design

Number of Times Taught: 1 Average Enrollment: Solar Energy Heating Systems

Instructor:

Liming, Glenn

(704) 586-4091 **CAR** 1122

Course Number:

Industrial/Vocational Department:

Program or Curriculum: Solar Energy Systems-Res. and

Comm. Construction

Credits:

Student Level: Duration:

Freshman or Sophomore 11 Weeks, 6.0 hrs per week

Contact Hours: Classroom:

33 33

Topics Covered Extensively: Intro. to Solar Energy;

Swimming Pool Heating Number of Times Taught: 1 Average Enrollment:

NORTH DAKOTA

Bismarck Junior College [2988]

Bismarck, North Dakota 58501

(701) 223-4500

Programs and Curricula

Solar Heating

Laboratory:

Degree:

Certificate of Completion

Contact: McKinney, David (701) 255-0566

Students Taking or Completing Offering:

Plumber, Sheet Metal Worker

Solar Related Courses

Solar Energy

Instructor:

McKinney, David (701) 255-0566

Heating, Refrigeration, and Air Department: Conditioning

Program or Curriculum: Solar Heating

Credits:

Student Level:

Freshman or Sophomore

Duration: Contact Hours: 8 Weeks, 32.0 hrs per week 256

Classroom: 63 193 Laboratory:

Topics Covered Extensively; Plumbing Techniques; Sheet Metal Techniques; Solar Home Construction; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot

North Dakota State School of Science [2996]

Wahpeton, North Dakota 58075

Water; Space Heating; Space Cooling

(701) 671-1130

Programs and Curricula

Environmental Systems Design Degree:

Certificate, Diploma Whitcomb, Larry

(701) 671-2529

Students Taking or Completing Offering: Installer-Residential (Solar System), Installer-Commercial (Solar Systems), Trade Specialty, Plumber, Sheet Metal

Worker

Contact:

Solar Related Courses

Systems and Equipment

Instructor: Whitcomb, Larry

(701) 671-2529

Course Number:

ESD 203

Department:

Credits:

Environmental Systems

Student Level: Duration:

All levels

Contact Hours:

12 Weeks, 5.0 hrs per week

Classroom:

60

Topics Covered Extensively: Alternate Energy Sources; Heat and Energy Transfer; Intro. To Solar Energy; Plumbing Techniques; Sheet Metal Techniques; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Installation; Solar Systems Maintenance

Number of Times Taught: 1 Average Enrollment:

OHIO

North American Heating and Air Conditioning Wholesalers Association [90400] Home Study Institute

1661 West Henderson Columbus, Ohio 43220

Programs and Curricula

*Home Study Program

Contact:

Healy, James (614) 459-2100

Students Taking or Completing Offering:

Solar Technician

OKLAHOMA

None

OREGON

Linn-Benton Community College [6938]

Albany, Oregon 97321 (503) 928-2361

Programs and Curricula

Engineering Technology - Solar Energy Option

Degree:

AD, Engineering Tech

Contact:

Miller, Ďave (503) 928-2361

Solar Related Courses

Alternate Energy Sources

Course Number:

Department: **Engineering Technology**

Program or Curriculum: Engineering Tech. - Solar Energy

Option

Credite:

Student Level: Freshman or Sophomore 11 Weeks, 6.0 hrs per week

Duration: Contact Hours: 66

Classroom: 33

33 Laboratory:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy, Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design/ Elec'l Generation, Small Scale; Wind Power; Small Systems Number of Times Taught: 4

Average Enrollment:

Energy Systems Management Course Number: 6.220

Department: **Engineering Technology**

Program or Curriculum: Engineering Tech. - Solar Energy

Option

Credits:

3

Student Level: Freshman or Sophomore Duration: 11 Weeks, 3.0 hrs per week

Contact Hours: 33 Classroom: 33

Topics Covered Extensively: Energy Conservation; Energy Conversion: Heat and Energy Transfer; Intro. to Solar Systems Maintenance: Solar Systems Testing and Evaluation; Elec'l Generation, Central; Elec'l Generation, Small Scale; Process Heat, Industrial; Space Heating; Space Cooling: Wind Power, Central Systems; Wind Power, Small Systems

Solar Energy

Course Number: 6.221

Department: **Engineering Technology**

Program or Curriculum: Engineering Tech. - Solar Energy

Options

Credits:

Student Level: Freshman or Sophomore Duration: 11 Weeks, 3.0 hrs per week

Contact Hours: Classroom: 33

Topics Covered Extensively: Biomass Conversion: Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Materials Rocoarch; Passive Solar Technology; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Testing and Evaluation; Domestic Hot Water; Elec'l Generation, Small Scale; Space Heating; Wind Power, Small Systems

Number of Times Taught: 2 Average Enrollment:

PENNSYLVANIA

Keystone Junior College [3280]

La Plume Pennsylvania 18440 (707) 945-5141

Programs and Curricula

Solar Engineering Technology

Degree: AU, Applied Science in 30lar

Engineering Technology Kutch, Dennis/Cupilleri, Tom Contact:

(717) 945-5141

Students Taking or Completing Offering:

Solar Technician

Solar Related Courses

Sizing, Installation & Operation - Solar Heating (Residential Buildings)

Instructor:

Kutch, Dennis

(717) 945-5141

Department: Solar Energy Study & Res. Cnt. Program or Curriculum: Solar Engineering Technology

Student Level: All levels

Duration: 2 Weeks, 36.0 hrs per week

Contact Hours: 72 Classroom: 30 42

Topics Covered Extensively: Energy Conservation; Plumbing Techniques; Sheet Metal Techniques; Solar System Components; Solar Home Construction; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation: Domestic Hot Water: Swimming Pool Heating: Space Heating

Solar Hydronic Systems/Solar Air Systems Instructor: Kutch, Dennis

(717) 945-5141

Course Number: 220

Department: Program or Curriculum:

Solar Energy Study & Res. Cnt. Solar Engineering Technology

Credits:

All levels

Duration: 16 Weeks, 3.0 hrs per week

Contact Hours: 48

Student Level:

30 Classroom: Laboratory: 18

Topics Covered Extensively: Energy Conservation; Heat and Energy Transfer: Plumbing Techniques; Sheet Metal Techniques: Solar System Components: Solar Economics: Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating

Training - Design of Solar Heating Systems for Buildings

Kutch, Dennis Instructor: (717) 945-5141

Solar Energy Study & Res. Cnt. Department: Program or Curriculum: Solar Engineering Technology

Student Level: Junior or Senior

Duration: 2 Weeks, 36.0 hrs per week

Contact Hours: 72 Classroom: 42 30 Laboratory:

Topics Covered Extensively: Energy Conservation; Energy Storage; Heat and Energy Transfer; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Domestic Hot Water; Space Heating

Pennsylvania Institute of Technology [90180]

414 Sansom St.

Upper Darby, Pennsylvania 19082

Programs and Curricula

Energy Technology

AD, Specialized Technology Degree:

Contact: Thomas, Richard B.

Students Taking or Completing Offering: Solar Technician, Electrician

Solar Related Courses

Advanced Solar Design

Thomas, Richard Instructor:

(215) 352-7100

Course Number:

Program or Curriculum: Energy Technology

Credits:

High School Graduate Student Level: Duration: 12 Weeks, 4.0 hrs per week

Contact Hours: 48

Topics Covered Extensively: Solar Collector Evaluation/

Design; Solar Systems Design Number of Times Taught: 1 Average Enrollment:

Basic Solar Design

Thomas, Richard B. Instructor: .

(215) 352-7100

Course Number:

Program or Curriculum: **Energy Technology**

Credits:

Student Level: High School Graduate

Duration: 12 Weeks, 5.0 hrs per week

Contact Hours:

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Solar Home Construction; Solar Collector

Evaluation/Design Number of Times Taught: 1 Average Enrollment:

Energy Conversion

Instructor: Thomas, Richard

(215) 352-7100

Course Number:

Program or Curriculum: **Energy Technology**

Credits:

High School Graduate

Student Level: Duration:

12 Weeks, 5.0 hrs per week

Contact Hours:

Topics Covered Extensively: Alternate Energy Sources; Energy Conversion; Intro. to Solar Energy; Wind Power. Small Systems

Number of Times Taught: 1 Average Enrollment:

Pennsylvania State University - Shenango Valley Campus

Sharon, Pennsylvania 16146

(412) 981-1640

Programs and Curricula

Solar Heating and Cooling Technology

Short Course Certificate Degree: Houlihan, John F. Contact:

(412) 981-1640

Solar Related Courses

Fundamentals of Solar Energy

Houlinan, J. F. Instructor

> (421) 981-1640 PHYS. 296

Course Number: Department: **Physics**

Program or Curriculum: Solar Heating and Cooling Tech.

Credits:

Student Level: Freshman or Sophomore Duration: 10 Weeks, 2.0 hrs. per week

Contact Hours: 20 Classroom: 15 Laboratory 5

Topics Covered Extensively: Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Photovoltaics; Solar System Components: Solar Home Construction: Solar Collector Evaluation/Design; Solar Systems Design; Space Heating;

Space Cooling; Wind Power, Central Systems

Number of Times Taught: 2 Average Enrollment:

Introduction to Solar Energy

Houlihan, J.F. Instructor:

(412) 981-1640 PHYS. 297

Course Number: Department: **Physics**

Program or Curriculum: Solar Heating and Cooling Tech.

Credits:

Student Level: Freshman or Sophomore 10 Weeks, 3.0 hrs per week Duration:

Contact Hours: 30 28 Classroom: Laboratory:

Topics Covered Extensively: Intro. to Solar Energy; Space

Heating; Wind Power, Central Systems

Number of Times Taught: 2 Average Enrollment:

Solar Heating and Cooling Technology

Houlihan, J. F Instructor: (412) 981-1640

PHYS. 297 Course Number: **Physics** Department:

Program or Curriculum: Solar Heating and Cooling Tech.

Credits:

Student Level: All levels

Duration: 2 Weeks, 40.0 hrs per week

Classroom: 60 Laboratory: 12

Topics Covered Extensively: Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar

Energy; Marketing/Market Analysis; Passive Solar Technology; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water, Space Heating, Space Cooling

Number of Times Taught: 1 Average Enrollment:

Installation: Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming

Pool Heating: Space Heating Number of Times Taught: 2 Average Enrollment:

Triangle Institute of Technology, Inc. [90110]

635 Smithfield St.

Pittsburgh, Pennsylvania 15222

(412) 255-6170

Programs and Curricula

Solar Energy Systems Degree:

AD, Specialized Technology

Contact:

Knoyer, Ralph

(412) 255-6170

Students Taking or Completing Offering: Solar Technician;

Electrician, Plumber, Sheet Metal Worker

Solar Related Courses

Solar Energy Systems

Knoyer, Ralph Instructor: (412) 255-6170

400.0

Course Number:

Department: Refrig., Heat., Vent., and Air Cond.

Program or Curriculum: Solar Energy Systems

Credits:

Student Level: High School Graduate 16 Weeks, 25.0 hrs per week Duration:

390 Contact Hours: Classroom: 90 300 Laboratory:

Topics Covered Extensively: Solar Systems Design: Solar Systems Installation: Solar Systems Maintenance: Solar

Systems Testing and Evaluation

RHODE ISLAND

None

SOUTH CAROLINA

Beaufort Technical Education Center [9910]

Beaufort, South Carolina 29902 (803) 524-3380

Programs and Curricula

Refrigeration and Air Conditioning — Solar Energy

Applications

Degree: AD, Refrigeration and Air Condi-

tioning, General Technology

Spivey, Edward F. Contact:

(803) 524-0148

Students Taking or Completing Offering: Installer-Residential (Solar System), Solar Technician, Trade

Department:

Solar Related Courses

Solar Energy Application

Spivey, E.F. Instructor:

(803) 524-0148

Course Number:

ARC 240 Refrigeration and Air Conditioning

Program or Curriculum: Refrigeration and Air Conditioning-

Solar Energy Appli.

Credits:

Student Level: High School Graduate

11 Weeks, 6.0 hrs per week Duration:

Contact Hours: 66 33 Classroom: Laboratory: 33

Topics Covered Extensively: Heat and Energy Transfer

Florence Darlington Tech [3990]

Florence, South Carolina 29502

(803) 662-8151

Programs and Curricula

Conversion of Solar Energy Climate Control Degree:

Jackson, Edward (803) 662-8151 Contact:

Solar Related Courses

Conversion of Solar Energy

Instructor: Jackson, Edward (803) 662-8151

ÀRC 204 Course Number:

Department: Industrial Trades - Climate Control Program or Curriculum: Conversion of Solar Energy

Credits:

Student Level:

High School Graduate 11 Weeks, 6.0 hrs per week

Duration: Contact Hours:

33 Classroom: Laboratory: 33

Topics Covered Extensively: Alternate Energy Sources: Appropriate Technology; Intro. to Solar Energy; Solar Systems Components: Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar

Systems Maintenance; Domestic Hot Water

Number of Times Taught: 4 Average Enrollment:

Trident Technical College [8818]

PO Box 10367

Charleston, South Carolina 29411

(803) 553-2375

Programs and Curricula

Air Conditioning — Refrigeration

Degree: Air Conditioning — Refrigeration

Moore, James L. Contact:

(803) 572-6180 Students Taking or Completing Offering: Installer-

Residential (Solar System)

Solar Related Courses

Solar Heating

Instructor:

Moore, James L.

(803) 572-6180

Air Conditioning - Refrigeration Department:

Program or Curriculum: Air Conditioning - Refrigeration

Student Level:

High School Graduate

Duration:

3 Weeks, 30.0 hrs per week 90

Contact Hours: Classroom:

30

Laboratory:

60

Topics Covered Extensively: Heat and Energy Transfer; Solar System Components; Solar Collector Evaluation/

Design; Domostic Hot Water; Space Heating

York Technical College [3996]

Rock Hill, South Carolina 29730

(803) 328-3843

Programs and Curricula

Conversion of Solar Energy

Conditioning, Refrigeration, Degree:

and Heating

Contact: White, Lacy (803) 324-3130

Students Taking or Completing Offering: Installer-Residential (Solar System), Installer-Commercial (Solar

System), Trade Specialty

Solar Related Courses

Conversion of Solar Energy

Instructor: White, Lacy Topics Covered Extensively: Plumbing Techniques; Solar Systems Installation: Domestic Hot Water; Space Heating

Number of Times Taught: 1 Average Enrollment:

SOUTH DAKOTA

None

TENNESSEE

Motlow State Community College [6836]

Tullahoma, Tennessee 37388

(615) 455-8511

Programs and Curricula

Energy Engineering Technology Degree:

AD, Engineering Technology -

Energy Engineering Emphasis

Contact:

Thornton, Otis B.

(615) 455-8511

Students Taking or Completing Offering: Installer-Residential (Solar System), Researcher, Solar Technician

Solar Related Courses

Solar Energy Applications

Instructor:

Lowndes, Richard

Course Number:

(615) 455-8511 **ERG 205**

Career Education

Department:

Program or Curriculum: Energy Engineering

Credits:

All levels

Student Level: **Duration:**

10 Weeks, 5.0 hrs per week

Contact Hours:

50 20

Classroom: Laboratory:

30

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Solar System Components; Solar Economics; Solar Home Construction: Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating

Solar Energy Theory

Instructor:

Lowndes, Richard

Course Number:

(615) 455-8511 **ERG 204**

Department:

Career Education

Program or Curriculum: Energy Engineering Technology

Credits:

Student Level:

All levels

Duration: Contact Hours: 10 Weeks, 5.0 hrs per week

Classroom:

20

Laboratory:

30

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Solar Systems Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating

TEXAS

Central Texas College [4003]

Killeen, Texas 76541 (817) 526-1211

Programs and Curricula

Solar Energy Systems Specialist

Degree:

Certificate of Completion

Tresler, Clarence

Contact:

(817) 526-1236

Students Taking or Completing Offering: Installer-Residential (Solar System), Installer-Commercial (Solar

System), Solar Technician, Trade Specially

Solar Energy Systems Technology

Degree:

AD, Applied Sciencé

Contact:

Tesler, Clarence (817) 526-1236

Students Taking or Completing Offering: Installer-Residential (Solar System), Installer-Commercial (Solar System), Solar Technician, Trade Specialty

Solar Related Courses

Principles of Solar Energy

Instructor:

Tresler, Clarence

(817) 526-1236

Course Number:

SESY 1314

Department: Industrial Technology

Program or Curriculum: Solar Energy Systems Technology/

Solar Energy Systems Specialist

Credits: Student Level: Duration:

Freshman or Sophomore 16 Weeks, 3.0 hrs per week

Contact Hours: 48

Classroom: 48 Topics Covered Extensively: Intro. to Solar Energy

Number of Times Taught: 2 Average Enrollment:

Solar Cooling Systems

Instructor: Tresler, Clarence (817) 526-1236 SESY 241

Course Number:

Department: Industrial Technology Program or Curriculum: Solar Energy Systems Technology

Credits:

Student Level: Freshman or Sophomore Duration: 16 Weeks, 6.0 hrs pcr week

Contact Hours: Classroom: 48 Laboratory: 48

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Plumbing Techniques; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation

Solar Energy Special Projects

Tresler, Clarence Instructor:

Course Number:

(817) 523-1236 **SESY 231**

Department:

Industrial Technology

Program or Curriculum: Solar Energy Systems Technology

Credits:

Student Level:

Freshman or Sophomore 16 Weeks, 6.0 hrs per week

Duration: Contact Hours: 96 Classroom: 16 80 Laboratory:

Topics Covered Extensively: Energy Conversion; Energy Storage; Heat and Energy Transfer; Plumbing Techniques; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating; Space Cooling

Solar Heating Systems

Instructor:

Tresler, Clarence (817) 526-1236 **SESY 141**

Course Number:

Department:

Program or Curriculum: Solar Energy Systems Technologyi

Solar Energy Systems Specialist

Credits:

Student Level: Duration:

Freshman or Sophomore 16 Weeks, 6.0 hrs per week

Contact Hours: 96 48 Classroom: Laboratory: 48

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer: Plumbing Techniques; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Navarro College [3593] Corsicana, Texas 75110

(214) 874-6501

Contact:

Programs and Curricula

Solar Energy Installers-Mechanics

OTHER, Solar Energy Installers, Degree:

Mechanics Kasprzyk, Ernest

(214) 874-6501

Students Taking or Completing Offering: Installer-Residential (Solar System), Installer-Commercial (Solar System)

Solar Engineering Technology

AD, Applied Science - Solar Degree:

Engineering Technology

Myers, Arthur Contact:

(214) 874-6501

Students Taking or Completing Offering: Solar Technician

Solar Related Courses

Collector and Energy Storage

Myers, Arthur Instructor:

(214) 874-6501

Program or Curriculum: Solar Engineering Technology

Credits:

Freshman or Sophomore: Student Level: Duration: 16 Weeks, 6.0 hrs per week

Contact Hours: 96

Classroom: 32

Laboratory: 64 Topics Covered Extensively: Energy Conservation; Energy Conversion: Energy Storage: Heat and Energy Transfer;

Materials Research; Passive Solar Technology; Plumbing Techniques; Sheet Metal Techniques; Solar System Components: Solar Home Construction: Solar Collector Evaluation/Design; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water; Swimming Pool Heating; Space Heating; Space Cooling

Collectors, Energy Storage, Installation and Service

Norman, Albion Instructor: (214) 874-6501

Cource Number: SE1044

Program or Curriculum: Solar Energy Installers/ Mechanics

Credits:

Student Level: Freshman or Sophomore Duration: 16 Weeks, 6.0 hrs per week

Contact Hours: 96 Classroom: 32 64 l.aboratory:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy Passive Solar Technology; Plumbing Techniques; Sheet Metal Techniques; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation, Domestic Hot Water, Space Heating; Space Cooling

Economics, Codes, Legal, Consumerism

Instructor: Myers, Arthur (214) 874-6501

Department: Solar Energy

Program or Curriculum: Solar Engineering Technology

Credits:

Student Level: Freshman or Sophomore Duration: 16 Weeks, 2.0 hrs per week

Contact Hours: 32 Classroom: 32

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Marketing/Market Analysis; Solar Economics; Solar Home Construction; Solar Law/ Legislation; Solar Collector Evaluation/Design; Solar Systems Testing and Evaluation; Domestic Hot Water; Swimming Pool Heating; Space Heating; Space Cooling **Energy Science I**

Instructor: Myers, Arthur (214) 874-6501

Solar Energy Department: Program or Curriculum: Solar Engineering Technology

Credits:

Student Level: Freshman or Sophomore Duration: 16 Weeks, 6.0 hrs per week

Contact Hours: Classroom: 48 48 Laboratory:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Plumbing Techniques; Sheet Metal Techniques; Solar System Components; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water; Space Heating; Space Cooling

Energy Science II Instructor: Myers, Arthur

(214) 874-6501 Department: Solar Energy

Program or Curriculum: Solar Engineering Technology

Credits:

Student Level: Freshman or Sophomore 16 Weeks, 6.0 hrs per week Duration:

Contact Hours: 96 Classroom: 48 Laboratory: 48

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Plumbing Techniques; Sheet Metal Techniques; Solar System Components; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Domestic Hot Water; Space

Heating; Space Cooling

Introduction to Solar Heating and Cooling

Instructor: Norman, Albian (214) 874-6501

SE1013 Course Number:

Occupational Education Department:

Program or Curriculum: Solar Energy Installers/ Mechanics

Credits:

Student Level: Freshman or Sophomore Duration: 16 Weeks, 3.0 hrs per week

Contact Hours: 48 Classroom:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Heat and Energy Transfer; Intro. to Solar Energy, Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Home Construction; Solar Systems Design; Domestic Hot Water; Elec'l Generation, Small

Scale; Space Heating; Space Cooling

Number of Times Taught: 1 Average Enrollment:

Materials and Fabrication

Vaughn, Ralph (214) 874-6501 Instructor:

SE1034

Course Number:

Occupational Education Department:

Program or Curriculum: Solar Energy Installers/ Mechanics

Credits:

Student Level: Freshman or Sophomore Duration: 16 Weeks, 6.0 hrs per week

Contact Hours: 96 32 Classroom: 64 Laboratory:

Topics Covered Extensively: Energy Storage; Heat and Energy Transfer; Materials Research; Plumbing Techniques; Sheet Metal Techniques; Solar System Components; Solar Home Construction; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot

Water; Space Heating; Space Cooling

Materials and Material Handling

Instructor: Myers, Arthur

(214) 874-6501

Program or Curriculum: Solar Engineering Technology

Credits:

Student Level: Duration:

Freshman or Sophomore 16 Weeks, 5.0 hrs per week

Contact Hours: 80 Classroom: 16 Laboratory: 64

Topics Covered Extensively: Materials Research; Plumbing Techniques: Sheet Metal Techniques: Domestic Hot

Water; Space Heating; Space Cooling

Non-residential Applications & Future Technology

Instructor:

Myers, Arthur (214) 874-6501

Department:

Solar Energy

Program or Curriculum:

Solar Engineering Technology

Credits:

Student Level:

Freshman or Sophomore

Duration: Contact Hours: 80

16 Weeks, 5.0 hrs per week

Classroom: 32 48 Laboratory:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Passive Solar Technology; Photovoltaics; Solar System Components; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Swimming Pool Heating; Elec'l Generation, Central; Elec'l Generation, Small Scale; Process Heat, Agricultural; Process Heat, Industrial; Space Heating; Space Cooling

Operational Diagnosis

Instructor:

Myers, Arthur (214) 874-6501

Department:

Solar Energy Program or Curriculum: Solar Engineering Technology

Credits:

Student Level:

Freshman or Sophomore 16 Weeks, 5.0 hrs per week

Duration: Contact Hours: Classroom:

32 Laboratory: 48

Topics Covered Extensively: Plumbing Techniques; Sheet Metal Techniques; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation

Sizing Design and Retrofit

Instructor:

Myers, Arthur (214) 874-6501

Department:

Solar Energy

Program or Curriculum: Solar Engineering Technology

Credits:

Student Level:

Freshman or Sophomore 16 Weeks, 6.0 hrs per week

Duration: Contact Hours:

Classroom: 48 Laboratory: 48

Topics Covered Extensively: Solar Home Construction; Solar Systems Design; Solar Systems Installation; Solar Systems Testing and Evaluation; Domestic Hot Water;

Space Heating; Space Cooling

Solar Heating and Cooling Systems

Instructor:

Myers, Arthur (214) 874-6501

Course Number:

SE1064

Department:

Occupational Education

Program or Curriculum: Solar Energy Installers/ Mechanics

Credits:

Student Level:

Freshman or Sophomore

Duration: Contact Hours: 16 Weeks, 6.0 hrs per week 96

Classroom: Laboratory:

32 64

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Materials Research; Passive Solar Technology; Plumbing Techniques: Sheet Metal Techniques: Solar System Components; Solar Collector Evaluation/Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Process Heat, Agricultural: Process Heat, Industrial; Space Heating; Space Cooling

Average Enrollment:

Solar Practicum

Instructor:

Myers, Arthur (214) 874-6501

Solar Energy

Department: Program or Curriculum:

Solar Engineering Technology

Credits:

Student Level: Duration:

Freshman or Sophomore 16 Weeks, 3.0 hrs per week

Contact Hours: Laboratory:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Intro. to Solar Energy; Materials Research; Plumbing Techniques; Sheet Metal Techniques; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Space Heating; Space Cooling

48

Technical Surveys of Energy Sources

Instructor:

Duration:

Myers, Arthur (214) 874-6501

Department:

Solar Energy Solar Engineering Technology

Program or Curriculum: Credits:

Student Level:

Freshman or Sophomore 16 Weeks, 3.0 hrs per week

Contact Hours: 48 Classroom: 48

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Biomass Conversion; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer, Intro. to Solar Energy, Passive Solar Technology; Photovoltaics; Domestic Hot Water; Swimming Pool Heating; Elec'l Generation, Central; Elec'l Generation, Small Scale; Process Heat, Agricultural; Process Heat, Industrial; Space Heating; Space Cooling; Wind Power, Central Systems; Wind Power, Small Systems

North Lake College [29066]

Irving, Texas 75062 (214) 255-5229

Programs and Curricula

Solar Energy Technician

Degree:

AD, Solar Technology

Contact;

Knowles, Jim (214) 255-5325

Students Taking or Completing Offering: Solar Technician

Solar Related Courses

Energy Science I

Instructor:

Duration:

Knowles, Jim (214) 255-5260

Department:

Science/Math/Technology Program or Curriculum: Solar Energy Technician

Credits:

Student Level:

Freshman or Sophomore 16 Weeks, 6.0 hrs per week

Contact Hours:

Topics Covered Extensively: Energy Conversion; Heat and **Energy Transfer**

Future Technology

Instructor:

Knowles, Jim (214) 255-5260

Department:

Science/Math/Technology Program or Curriculum: Solar Energy Technician

Credits:

Student Level: Freshman or Sophomore 16 Weeks, 3.0 hrs per week Duration:

Contact Hours: 48 48 Classroom:

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Domestic Hot Water, Swimming Pool Heating: Elec'l Generation, Central; Elec'l Generation, Small Scale; Process Heat, Agricultural; Process Heat, Industrial; Space Cooling

Introduction to Solar

Knowles, Jim Instructor: (214) 255-5260

Science/Math/Technology Department: Program or Curriculum: Solar Energy Technician

Credits:

Student Level: Freshman or Sophomore 16 Weeks; 2.0 hrs per week Duration:

Contact Hours: Classroom: 32

Topics Covered Extensively: Energy Conservation; Passive Solar Technology

Materials — Material Handling

Instructór: Knowles, Jim (214) 255-5260

Science/Math/Technology

Department: Program or Curriculum: Solar Energy Technician Credits: Student Level: Freshman or Sophomore

16 Weeks, 5.0 hrs per week Duration: Contact Hours: 80

16 Classroom: Laboratory: 64

Topics Covered Extensively: Plumbing Techniques; Sheet

Metal Techniques

Operational Diagnosis

Instructor: Knowles, Jim (214) 255-5260

Department: Science/Math/Technology Program or Curriculum: Solar Energy Technician

Credits:

Student Level: Freshman or Sophomore Duration: 16 Weeks, 4.0 hrs per week

Contact Hours: Classroom? 32 Laboratory: 32

Topics Covered Extensively: Solar Systems Design: Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation

Sizing Design and Retrofit

Instructor: Knowles, Jim

(214) 255-5260

Science/Math/Technology Department: Program or Curriculum: Solar Energy Technician

Credits:

Student Level: Freshman or Sophomore Duration: 16 Weeks, 7.0 hrs per week

Contact Hours: 112 Classroom: 48 Laboratory: 64

Topics Covered Extensively: Solar Systems Design; Solar

Systems Installation

Solar Codes and Consumerism

Instructor: Knowles, J. (214) 255-5260

Science/Math/Technology Program or Curriculum: Solar Energy Technician

Credits:

Freshman or Sophomore Student Level: Duration: 16 Weeks, 2.0 hrs per week

Contact Hours: 32 Classroom: 32

Topics Covered Extensively: Marketing/Market Analysis; Solar Energy Policy Development; Solar Economics; Solar Law/Legislation

Solar Practicum

Knowles, Jim Instructor:

(214) 255-5260

Science/Math/Technology Department: Program or Curriculum: Solar Energy Technician

Credits:

Student Level: Freshman or Sophomore 16 Weeks, 5.0 hrs per week Duration:

Contact Hours:

Technical Survey of Energy Sources

Knowles, il Instructor: (214) 255-5260

Science/Math/Technology Department: Program or Curriculum: Solar Energy Technician

Credits:

Freshman or Sophomore Student Level:

Duration: 16 Weeks

Topics Covered Extensively: Alternate Energy Sources; Biomass Conversion; Energy Conservation; Energy Conversion; Wind Power, Central Systems

Odessa College [3596]

Odessa, Texas 79760

(915) 337-5381 Programs and Curricula

Solar Power

Witcher, Norman Contact: (915) 337-5381

Students Taking or Completing Offering: Solar Technician

Solar Related Courses

Solar Power

Instructor: Witcher, Norman

(915) 337-5381 R/AC 2300 Course Number:

Department: Refrigeration & Air Conditioning

Program or Curriculum: Solar Power

Credits:

Student Level: Freshman or Sophomore 16 Weeks, 10.0 hrs per week Duration: 160

Contact Hours: Classroom: 48 Laboratory: 112

Topics Covered Extensively: Appropriate Technology; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Solar Systems Components, Solar Systems Design; Solar Systems Installation; Solar System Mainte-

nance; Space Heating Number of Times Taught: 1 Average Enrollment:

Ranger Junior College [3603]

Ranger, Texas 76470 (817) 647-3234

Programs and Curricula

Air Conditioning & Refrigeration — Solar Energy Option

AD, Applied Science Degree: Contact: Stiles, Alton (817) 647-3234

Students Taking or Completing Offering: Solar Technician

Solar Related Courses

Air Conditioning and Refrigeration - VII

Course Number: Department:

AR 281 Air Cond. & Ref.

Program or Curriculum: A/C and Refrig. - Sol. Ener. Option

Credits:

Freshman or Sophomore Student Level: Topics Covered Extensively: Heat and Energy Transfer; Solar System Components; Solar Collector Evaluation/ Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance: Domestic Hot Water; Space Heating; Space Cooling

Fundamentals of Solar Heating & Cooling

Course Number: AR 263

Department: Air Cond. & Retrig.

Program or Curriculum: A/C and Refrig. - Sol. Ener. Option

Credits:

Freshman or Sophomore Student Level: Topics Covered Extensively: Energy Conversion; Energy Storage: Heat and Energy Transfer; Intro. to Solar Energy; Solar System Components; Solar Collector Evaluation/ Design; Solar Systems Design; Space Heating; Space Cooling

Solar Thermal Energy Systems

Instructor Stiles, Alton

(817) 647-3234

AR 264 Course Number:

Air Conditioning/Refrigeration Department: Program or Curriculum: A/C and Refrig. - Sol. Ener. Option

Credits

Freshman or Sophomore Student Level: 16 Weeks, 10.0 hrs per week Duration:

Contact Hours: 160 32 Classroom: Laboratory: 128

Topics Covered Extensively: Plumbing Techniques; Solar Systems Components; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot Water; Elec'l Generation, Small Scale; Space Heating; Space Cooling

Tyler Junior College [3648]

Tyler, Texas 75701 (214) 597-4281

Programs and Curricula

Air Conditioning & Refrigeration Technology

Degree: Contact: AD, Applied Science Minter, Richard T.

(214) 593-4401

Students Taking or Completing Offering: Trade Specialty

Solar Related Courses

Introduction to Solar Systems

Instructor: Robinson, Carol T.

(214) 592-8619 AC 113S Course Number:

Department: Technology

Program or Curriculum: Air Conditioning & Refrig. Tech.

Credits:

Student Level: Freshman or Sophomore

16 Weeks, 3.0 hrs per week Duration:

Contact Hours:

48 Classroom:

Topics Covered Extensively: Intro, to Solar Energy Average Enrollment:

Solar Systems Installation

Robinson, Carol T. Instructor:

(214) 592-8619

Course Number:

AC 223S Technology

Department: Program or Curriculum: Air Conditioning & Refrig. Tech.

Credits:

Freshman or Sophomore Student Level:

Duration:

16 Weeks, 6.0 hrs per week

Contact Hours: 96 Classroom: 32

64

Topics Covered Extensively: Solar System Components; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot

Water; Space Heating

Average Enrollment:

UTAH

[3671] Dixie College Saint George, Utah 84770

(801) 673-4811

Programs and Curricula

Solar Technology

Certificate of Completion Degree:

Hacking, John Contact: (801) 673-4811

Solar Related Courses

Introduction to Applied Solar Energy

Tait. Don Instructor: (801) 673-4811

ST 150 Course Number:

Department: Engineering Tech. Program or Curriculum: Solar Technology

Credits:

Student Level: Freshman or Sophomore 11 Weeks, 5.0 hrs per week Duration:

Contact Hours: Classroom:

Topics Covered Extensively: Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Marketing/Market Analysis; Materials Research; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Economics; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation; Domestic Hot

Water; Space Heating; Space Cooling

Number of Times Taught: 12 Average Enrollment:

Solar Energy — Home Use Applications

Instructor: Tait, Don (801) 673-4811

ST 123 Course Number: Engineering Tech. Department: Program or Curriculum: Solar Technology

Credits:

Freshman or Sophomore Student Level: 11 Weeks, 3.0 hrs per week Duration:

33 Contact Hours: Classroom: 16 Laboratory: 15

Topics Covered Extensively: Alternate Energy Sources; Energy Conservation; Energy Conversion; Energy Storage; Intro. to Solar Energy, Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Economics; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing and Evaluation: Domestic Hot Water; Space Heating; Space Cooling

Number of Times Taught: 9

Average Enrollment:

VERMONT. VIRGINIA

WASHINGTON

North Seattle Community College [9704]

Seattle, Washington 98103

(206) 634-4444

Programs and Curricula

Heating — Solar Energy

Swenson, Don Contact: (206) 634-4419

Students Taking or Completing Offering: Sheet Metal Worker

Solar Related Courses

Heating — Solar Energy

Swenson, Don Instructor:

(206) 634-4419

Department:

Engineering Technology Program or Curriculum: Heating-Solar Energy High School Graduate

Student Level: Duration:

6 Weeks, 15.0 hrs per week 90

Contact Hours: Classroom:

45 Laboratory: 45 Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Intro. to Solar Energy; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Domestic Hot Water; Space Heating

Solar Energy

Instructor:

Stepnich, Ivan

(206) 634-4423

Course Number.

ECT 207

Department:

Engineering Related Technologies

Program or Curriculum: Heating-Solar Energy

Credits:

Student Level: Duration:

Freshman or Sophomore 11 Weeks, 3.0 hrs per week

Contact Hours: Classroom:

33 33

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Conservation; Energy Conversion; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Passive Solar Technology; Plumbing Techniques; Solar System Components; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Testing and Evaluation; Domestic Hot Water; Elec'l Generation, Central; Process Heat, Industrial; Space Heating

Number of Times Taught: 1 Average Enrollment:

WEST VIRGINIA

None

WISCONSIN

Moraine Park Technical Institute [9256]

Fond Du Lac, Wisconsin 54935 (414) 922-8611

Programs and Curricula

Solar Energy

Contact:

Pasch, Rodney (414) 922-8611

Students Taking or Completing Offering: Contractor, Do-ityourself Homeowner, Electrician, Plumber, Sheet Metal Worker

Solar Related Courses

Solar Applications for Construction Industry

Instructor:

Pasch, Rodney (414) 922-8611

Course Number:

401-479

Department:

Trade and Technical

Program or Curriculum:

Solar Energy

Credits:

Student Level:

All levels

Duration: 1 Week, 6.0 hrs per week

Contact Hours:

Topics Covered Extensively: Intro. to Solar Energy; Solar

Home Construction Number of Times Taught: 5 Average Enrollment:

Solar Energy — Air Handling Systems

Instructor:

(414) 922-8611

Course Number:

401-483

Department:

Trade and Technical

Program or Curriculum: Solar Energy

Credits:

Student Level:

All levels

Duration:

10 Weeks, 2.0 hrs per week

Contact Hours:

20

Classroom:

20 Topics Covered Extensively: Heat and Energy Transfer;

Solar System Components; Space Heating Number of Times Taught: 2

Average Enrollment:

Solar Energy for Realtors

Instructor:

Pasch, R. (414) 922-8611

Course Number:

401-425

Department: Trade and Technical Program or Curriculum: Solar Energy

Credits:

3

Student Level:

All levels

Duration:

2 Weeks, 5.0 hrs per week

Contact Hours:

Topics Covered Extensively: Alternate Energy Sources

Number of Times Taught: 1 Average Enrollment:

Solar Energy Seminar

Instructor:

Pasch, R. (414) 922-9611

Course Number:

401-482

Trade and Technical Department: Program or Curriculum: Solar Energy

Credits:

All levels

Student Level: Duration: 1 Week, 4.0 hrs per week

Contact Hours:

Classroom:

Topics Covered Extensively: Alternate Energy Sources

Number of Times Taught: 2 Average Enrollment:

Solar Heat and Wind

Instructor:

Pasch, Rodney (414) 922-8611

Course Number:

401-480 Trade & Technical

Department: Solar Energy Program or Curriculum:

Credits:

All levels

Student Level: 2 Weeks, 10.0 hrs per week Duration:

Contact Hours:

Topics Covered Extensively: Space Heating; Wind Power,

Small Systems

Number of Times Taught: 5 Average Enrollment:

Wind Energy Applications Instructor:

Pasch, R.

(414) 922-8611

Course Number: 401-484

Department: Trade and Technical Program or Curriculum: Solar Energy

Credits:

Student Level:

All levels

Duration:

1 Week, 6.0 hrs per week

Contact Hours:

Topics Covered Extensively: Elec'l Generation, Small

Scale, Wind Power, Small Systems

Number of Times Taught: 1 Average Enrollment:

WYOMING

Sheridan College [3930]

Sheridan, Wyoming 82801

(307) 674-6446

Program and Curricula

Solar Energy Technology

AD, Engineering Technology -Degree:

Solar Option

Ohm, Kenneth R. (307) 674-6446

Students Taking or Completing Offering: Installer-Residential (Solar System), Installer-Commercial (Solar System), Solar Technician, Do-it-yourself Homeowner

Solar Related Courses

Energy Storage

Contact:

Course Number:

Program or Curriculum: Solar Energy Technology Student Level: Freshman or Sophomore

Topics Covered Extensively: Energy Storage; Photo-

voltaics; Wind Power, Small Systems

Installation and Service — Solar System

Course Number: 158

Program or Curriculum: Solar Energy Technology Student Level: Freshman or Sophomore

Topics Covered Extensively: Solar System Components; Solar Collector Evaluation/Design; Solar Systems Installation; Solar Systems Maintenance; Solar Systems Testing

and Evaluation; Space Heating; Space Cooling

Intro. to Solar Heating & Cooling

Course Number: 150

Program or Curriculum: Solar Energy Technology Student Level: Freshman or Sophomore

Topics Covered Extensively: Intro. to Solar Energy; Materials Research; Solar System Components; Solar Collector Evaluation/Design; Solar Systems Design; Domestic Hot Water; Elec'l Generation, Small Scale; Space Heating;

Space Cooling

Solar Collectors

Course Number: 151

Program or Curriculum: Solar Energy Technology Freshman or Sophomore Student Level: Topics Covered Extensively: Solar System Components;

Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Testing and Evaluation

Solar Energy Fundamentals

Instructor:

Ohm, Kenneth R. (307) 674-6446 19-190

Course Number:

Career/Tech

Department:

Program or Curriculum: Solar Energy Technology

Credits:

Student Level:

Freshman or Sophomore

Duration: Contact Hours: 16 Weeks, 4.0 hrs per week

Classroom:

48

Laboratory: 12

Topics Covered Extensively: Alternate Energy Sources; Appropriate Technology; Energy Storage; Heat and Energy Transfer; Intro. to Solar Energy; Solar Home Construction; Solar Collector Evaluation/Design; Solar Systems Design; Solar Systems Installation; Solar Systems Maintenance: Domestic Hot Water; Process Heat, Industrial; Space Heating; Space Cooling; Wind Power, Central Systems; Wind Power, Small Systems

Number of Times Taught: 2 Average Enrollment:

Solar Heating and Cooling Systems

Course Number:

Program or Curriculum: Solar Energy Technology Freshman or Sophomore Student Level:

Topics Covered Extensively: Energy Storage; Solar System Components; Solar Collector Evaluation/Design, Solar Systems Design; Domestic Hot Water; Process Heat, Agricultural; Process Heat, Industrial; Space Heating; Space Cooling

Wind Systems

Course Number:

153

Program or Curriculum: Solar Energy Technology Student Level: Freshman or Sophomore

Topics Covered Extensively: Wind Power, Central Systems;

Wind Power, Small Systems

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