FCS 110  Microbiology and Foods (3)
2 hours lecture - 3 hours laboratory
Note: Cross listed as MICR 110
Transfer acceptability: CSU
Introduction to the principles of microbiology with an emphasis on foodborne pathogens. Students will explore biological factors and controls relating to reproduction of microorganisms and the effects on public health. This course does not meet microbiology requirement for pre-health students.

FCS 136  Personal Finance (3)
3 hours lecture
Note: Cross listed as BUS 136
Transfer acceptability: CSU
A study of the effective management of personal and family resources. Budgeting, buying of goods and services, banking, credit, taxation, investing, insurance, home ownership, estate planning, and consumer protection.

FCS 150  Food and Culture (3)
3 hours lecture
Transfer acceptability: CSU
Food is an expression of cultural diversity, and traditional foods reflect geographic area and culture. Regional, ethnic, cultural, religious, historical, and social influences on food patterns are explored. Influence of socio-economic class, gender, and age on diet, health, and disease are also discussed.

FCS 165  Fundamentals of Nutrition (3)
3 hours lecture
Note: Cross listed as HE 165
Transfer acceptability: CSU; UC – FCS 165, FCS 185, BIOL 185, HE 165 combined: maximum credit, one course
The study of how food nourishes the body. Investigation of diet fads and fallacies, eating for fitness, and planning meals for optimum health throughout the life cycle.

FCS 170  Nutrition: Eating Disorders and Obesity (3)
3 hours lecture
Transfer acceptability: CSU
Review of etiology, incidence, socio-economic influences, and treatments. Interrelationships of genetics and environment (diet, exercise, and behavior) on weight management. Includes vocational information for working with the obese or eating-disordered.

FCS 185  Science of Human Nutrition (3)
3 hours lecture
Note: Cross listed as BIOL 185
Transfer acceptability: CSU; UC – FCS 165, FCS 185, BIOL 185, HE 165 combined: maximum credit, one course
Science of food, nutrients, and other substances therein; processes by which the organism ingests, digests, absorbs, transports, utilizes, and excretes food substances. Emphasis on biological, chemical, and physiological implications to human nutrition.

FCS 197  Family and Consumer Sciences Workshop (.5-3)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: May be taken 3 times
Transfer acceptability: CSU
Materials relative to the field of Family and Consumer Sciences.

Fashion (FASH)
Contact the Design and Consumer Education Department for further information.
(760) 744-1150, ext. 2349
Office: P-8A
For transfer information, consult a Palomar College Counselor.

Associate in Arts Degrees -
AA Degree requirements are listed in Section 6 (green pages).

FASH 100  Fashion Industry 3
FASH 105  Fashion Analysis/Clothing Selection 3
FASH 110  Textiles 3
FASH 125/  FASH 93 Specification Packets/Technical Design 3
FASH 130  History of Fashion/Costume 3
FASH 135  Basic Sewing Construction 3
FASH 136  Advanced Sewing Construction 3
FASH 137 or  Tailoring 3
FASH 149  Fine Dressmaking 3
FASH 139  Pattern Making/Fashion Design 3
FASH 141  Adv Patternmaking/Fashion Design 3
FASH 145  Fashion Illustration/Presentation 3
FASH 146  Computer Aided Design (CAD) for Fashion 3
FASH 148  Digital Design for Fashion 3
FASH 165  Sewing Laboratory 1
FASH 166  Tailoring Laboratory 5
FASH 167  Pattern-Making Laboratory 5
FASH 195  Field Studies in Fashion 2
CE 150  Cooperative Education Internship 2-3

Electives (Select one course)
FASH 93  Specification Packs/Technical Design 3
FASH 125/  BUS 145  Retailing/Promotion 3
FASH 132  Costume and Culture 3
FASH 147  Advanced Computer Aided Design (CAD) for Fashion 3
FASH 170  Introduction to Fabric Design/Painting 3
FASH 178  Fashion Career Portfolio 2

TOTAL UNITS 44 - 46

Fashion Merchandising
The Fashion Merchandising A.A. degree program provides students with an option for a career or the requisite foundation for transfer to a four-year college or university. Careers might include assistant buyer, assistant department manager, small store owner, visual merchandiser, advertising consultant, fashion coordinator, promotion coordinator, sales associate, or manufacturer’s sales representative.

Students should be aware that not all Fashion courses are offered every semester. See Class Schedule or Department Chairperson for additional information.

A.A. DEGREE MAJOR

Program Requirements Units
FASH 100  Fashion Industry 3
FASH 105  Fashion Analysis/Clothing Selection 3
FASH 110  Textiles 3
FASH 115  Visual Merchandising I 3.5
### COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

**FASH 90**  Design Collection  
3 hours lecture  -  4½ hours laboratory  
*Recommended preparation:* At least one of the following courses: FASH 135, 136, 139, 145  
*Note:* May be taken 2 times  
Lab course for fashion show line designers in any clothing category of women's, men's, teen's, and children's wear.

**FASH 93**  Specification Packets/Technical Design  
3 hours lecture  -  4½ hours laboratory  
*Note:* May be taken 2 times  

**FASH 100**  Fashion Industry  
3 hours lecture  
*Transfer acceptability:* CSU  
A study of the background and technology of the clothing industry. Includes contemporary problems of production and distribution; emphasis is on career options in the fashion industry.

**FASH 105**  Fashion Analysis and Clothing Selection  
3 hours lecture  
*Transfer acceptability:* CSU  
Examines fashion for professional and personal need as it relates to culture, wardrobe planning, and coordination.

**FASH 110**  Textiles  
2½ hours lecture  -  1½ hours laboratory  
*Transfer acceptability:* CSU  
Fibers, yarn, fabric construction, and finishes as related to selection, use, and care of textiles.

**FASH 115**  Visual Merchandising I  
3 hours lecture  -  1½ hours laboratory  
*Transfer acceptability:* CSU  
Designed to acquaint the student with basic techniques of effective retail store presentations including window and interior displays. Course activities include constructing and installing visual displays using the principles of design and designing store environments, utilizing fixtures, lighting, and other display materials.

**FASH 116**  Visual Merchandising II  
3 hours lecture  -  1½ hours laboratory  
*Transfer acceptability:* CSU  
Advanced visual design and application. Hands on experience in merchandise presentation and display; basic drafting techniques and drafting tools related to store planning and visual merchandising.

**FASH 119**  Fashion Buying/Management I  
3 hours lecture  
A study of management opportunities within the field of fashion retailing, at both the corporate and store level, with an emphasis on the role of store department management. The role and responsibilities of each management position will be fully explored, including fiscal responsibilities of each and the math skills necessary to accomplish goals. Topics covered include basic management skills, inventory control, labor laws governing the fashion retail industry, recruitment and interviewing, employee relations, including coaching and counseling, math skills pertinent to each position, and merchandise management and control.

**FASH 120**  Fashion Buying/Management II  
3 hours lecture  
*Transfer acceptability:* CSU  
Principles of fashion buying utilizing practical applications and case studies. Topics covered include merchandise planning and selection, resource relations, legal trade regulations, pricing, and merchandise management and control.

**FASH 125**  Retailing/Promotion  
3 hours lecture  
*Note:* Cross listed as BUS 145  
*Transfer acceptability:* CSU  
Principles and techniques of retailing, promotion, and advertising pertinent to retail policies and procedures. Includes psychological aspect of retailing. Working foundation for those looking forward to employment in this area.

**FASH 126**  Fashion Show Presentation  
½ hour lecture  -  1½ hours laboratory  
*Note:* May be taken 4 times  
*Transfer acceptability:* CSU  
Applied study and practical application of fashion show and special event production and promotional skills. Strategies and techniques studied include organizing, advertising, staging, timing, and coordinating models and their clothing and accessories. Produce the Fashion Merchandising/Fashion Design program's annual fashion show.

**FASH 130**  History of Fashion/Costume  
3 hours lecture  
*Transfer acceptability:* CSU  
Styles of dress from the Paleolithic period to the present as depicted in art forms and other media. Focuses on Western European costume.

**FASH 131**  Elementary Stage Costume and Make Up  
2 hours lecture  -  3 hours laboratory  
*Note:* Cross listed as TA 131  
*Transfer acceptability:* CSU  
Basic theories, techniques, and procedures of costume production and make-up application for stage, film, and television. Practical training in college productions.

**FASH 132**  Costume and Culture  
3 hours lecture  
*Transfer acceptability:* CSU; UC  

**FASH 135**  Basic Sewing Construction  
1½ hours lecture  -  4½ hours laboratory  
*Corequisite:* FASH 165  
*Note:* May be taken 2 times  
*Transfer acceptability:* CSU  
Quality garments will be produced utilizing machine and manual industry sewing and pattern techniques.

**FASH 136**  Advanced Sewing Construction  
1½ hours lecture  -  4½ hours laboratory  
*Prerequisite:* A minimum grade of 'C' in FASH 135  
*Corequisite:* FASH 165  
*Note:* May be taken 2 times  
*Transfer acceptability:* CSU  
Sewing construction techniques beyond basic level, with increased difficulty in pattern assembly.

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To satisfy a prerequisite, the student must have earned a letter grade of 'A, B, C or CR in the prerequisite course, unless otherwise stated.  
FASH 137  Tailoring (3)
1½ hours lecture - 4½ hours laboratory
Corequisite: FASH 166
Recommended preparation: FASH 136
Transfer acceptability: CSU
Clothing principles emphasizing techniques in handling difficult fabrics. Principles of tailoring; planning and construction of suits and coats.

FASH 139  Pattern Making/Fashion Design (3)
1½ hours lecture - 4½ hours laboratory
Corequisite: FASH 167
Recommended preparation: FASH 135
Note: May be taken 2 times
Transfer acceptability: CSU
Pattern making through the flat pattern design method. Attention is given to design analysis and interpretation of design; application of design method in the development, presentation, and construction of original garments.

FASH 141  Advanced Pattern Making/Fashion Design (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of ‘C’ in FASH 139
Corequisite: FASH 167
Recommended preparation: FASH 135
Transfer acceptability: CSU
Advanced design skills for the fashion industry. Examination of one method of pattern development: draping. Creation of patterns to drape and fit on a dressmaker’s form.

FASH 145  Fashion Illustration and Presentation (3)
1½ hours lecture - 4½ hours laboratory
Transfer acceptability: CSU
Fundamentals in drawing of fashion figures and in illustration of fashion garments. Development of individual skills and style in graphic presentation.

FASH 146  Computer Aided Design (CAD) for Fashion (3)
1½ hours lecture - 4½ hours laboratory
Corequisite: FASH 168
Note: May be taken 2 times
Transfer acceptability: CSU
An introduction to computer aided pattern making for fashion using CAD technology. Hands-on experience with CAD technology to include the following operations: preparing and editing patterns; storage and retrieval of patterns, production of fashion industry patterns.

FASH 147  Advanced Computer Aided Design (CAD) for Fashion (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of ‘C’ in FASH 146
Corequisite: FASH 168
Note: May be taken 2 times
Transfer acceptability: CSU
Advanced theory and hands-on operation of CAD systems for fashion pattern making including pattern making blocks, grading, and marker making. Emphasis is placed on productivity and manufacturability for the fashion design industry.

FASH 148  Digital Design for Fashion (3)
1½ hours lecture - 4½ hours laboratory
Note: May be taken 2 times
Transfer acceptability: CSU
Design and illustrate fashion sketches, storyboards, and patterns using Adobe Illustrator and Adobe Photoshop. Development of individual skills and style in graphic presentations.

FASH 149  Fine Dressmaking (3)
1½ hours lecture - 4½ hours laboratory
Prerequisite: A minimum grade of ‘C’ in FASH 136
Corequisite: FASH 165
Note: May be taken 2 times
A study of techniques used to develop fine dressmaking skills including construction used in high-end ready to wear and couture fashions.

FASH 155  World of Fashion (2,3)
1, 2, or 3 hours lecture - ½, 1, 2, 3, or 4½ laboratory
Note: Fee charged; may be taken 4 times
Transfer acceptability: CSU
Extended field studies in textiles, design, manufacturing, forecasting, and retail practices as they apply to the national and international fashion industry. Emphasis upon field observation and examination of the fashion trends as they interrelate with the social, political, psychological, economic, and historical influences to create the fashion ambience. Geographical locations may vary.

FASH 165  Sewing Laboratory (1)
3 hours laboratory
Corequisite: FASH 135 or 136
Note: Pass/No Pass grading only; may be taken 4 times
Transfer acceptability: CSU
Enhancement of sewing skills by supervised practice and active participatory experience in individual study. Content to be determined by the need of the student in agreement and under observation and direction of the instructor.

FASH 166  Tailoring Laboratory (.5)
1½ hours laboratory
Corequisite: FASH 137
Recommended Preparation: FASH 135
Note: May be taken 4 times
Transfer acceptability: CSU
Enhancement of tailoring skills by supervised practice and active participatory experience in individual study. Content to be determined by the need of the student in agreement and under observation and direction of the instructor.

FASH 167  Pattern-Making Laboratory (5)
1½ hours laboratory
Corequisite: FASH 139 or 141
Note: May be taken 4 times
Transfer acceptability: CSU
Enhancement of pattern-making skills by supervised practice and active participatory experience in individual study. The specific content to be determined by the need of the student in agreement and under observation and direction of the instructor.

FASH 168  CAD Laboratory (5)
1½ hours laboratory
Corequisite: FASH 146 or 147
Note: May be taken 4 times
Transfer acceptability: CSU
Enhancement of CAD (Digital Design for Fashion) skills by supervised practice and active participatory experience in individual study. Specific content to be determined by the need of the student in agreement and under observation and direction of the instructor.

FASH 170  Introduction to Fabric Design/Painting (3)
6 hours lecture/laboratory
Transfer acceptability: CSU
Traditional and contemporary methods in the application of fabric dyes and paints using fundamental design principles for textiles and clothing.

FASH 175  Analysis, Evaluation, and Comparison of Ready-to-Wear (3)
3 hours lecture
Transfer acceptability: CSU
Analysis of the quality of materials, design, and construction in ready-to-wear garments and accessories; comparison of processes involved in manufacturing; concepts of sizing; principles of fit; and aids in buying and selling.

FASH 178  Fashion Career Portfolio (2)
2 hours lecture
Note: May be taken 2 times
Transfer acceptability: CSU
Creation of a professional portfolio for careers in the fashion industry.
FASH 195  Field Studies in Fashion  
1 hour lecture - 3 hours laboratory
Note: May be taken 2 times
Transfer acceptability: CSU
Fashion industry on site: process of designing, manufacturing, marketing, and merchandising of fashion apparel and related accessories.

FASH 197A  Fashion Merchandising Workshop  
(5-3) 
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: May be taken 4 times
Transfer acceptability: CSU
Covers areas of the fashion merchandising industry which are rapidly changing or require current short term specific training.

FASH 197B  Fashion Manufacturing Workshop  
(5-3) 
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: May be taken 4 times
Transfer acceptability: CSU
Covers areas of the fashion manufacturing industry which are rapidly changing or require current short term specific training.

FASH 197C  Fashion Design Workshop  
(5-3) 
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: May be taken 4 times
Transfer acceptability: CSU
Covers areas of the fashion design industry which are rapidly changing or require current short term specific training.

FASH 295  Directed Study in Fashion  
(1, 2, 3) 
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson/director
Note: May be taken 4 times
Transfer acceptability: CSU
Independent study for students who have demonstrated skills and/or proficiencies in Fashion subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

Fire Technology (FIRE)
Contact Public Safety Programs for further information.
(760) 744-1150, ext. 1722
Office: PSTC, 182 Santar Place, San Marcos

Associate in Arts Degrees -
AA Degree requirements are listed in Section 6 (green pages).
• Fire Technology - Emergency Management
• Fire Technology - General

Certificates of Achievement -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Fire Technology - Emergency Management
• Fire Technology - General

PROGRAMS OF STUDY
Fire Technology - Emergency Management
Prepares student for career in Emergency Management.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements  
Units
FIRE 100  Fire Protection Organization  
3
FIRE 115  Hazardous Materials I  
3
FIRE 120  Building Construction for Fire Protection  
3
FIRE 131  Emergency Preparedness  
3
FIRE 132  Fundamentals of Emergency Management  
3
FIRE 133  Disaster Mitigation  
3

Electives (Select 12 units)
FIRE 51  Fire Academy Preparation  
2
FIRE 71  Trench Rescue  
5
FIRE 72  Swiftwater Rescue  
5
FIRE 98  Fire Service Skills  
5-5
FIRE 101  Firefighter Safety  
3
FIRE 118  Fire Prevention Technology  
3
FIRE 125  Fire Apparatus and Equipment  
3
FIRE 130  Fire Protection Equipment and Systems  
3
FIRE 142  Fire Ethics  
3
FIRE 145  Fire Fighting Tactics and Strategy  
3
FIRE 151  Fire Fighter I Academy  
18
FIRE 152  Driver Operator Academy  
4.5
FIRE 160  Wildland Fire Control I  
3
FIRE 165  Fundamentals of Fire Protection Chemistry  
3
FIRE 168  Volunteer Fire Fighter Academy  
4
FIRE 175  Fire Command IA  
2.5
FIRE 180  Fire Prevention IA  
2.5
FIRE 176  Fire Command IB  
2.5
FIRE 181  Fire Prevention IB  
2.5
FIRE 185  Fire Management I  
2.5
FIRE 190  Fire Investigation IA  
2.5
FIRE 193  Fire Instructor IA  
2.5
FIRE 194  Fire Instructor IB  
2.5
FIRE 197A  Fire Technology General Topics  
5-5
FIRE 197B  Fire Technology Command Topics  
5-5
FIRE 197C  Fire Technology Field Topics  
5-5

TOTAL UNITS  
30

Fire Technology - General
Prepares students for a career in fire suppression, fire prevention and/or fire protection.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements  
Units
FIRE 100  Fire Protection Organization  
3
FIRE 101  Firefighter Safety  
3
FIRE 118  Fire Prevention Technology  
3
FIRE 120  Building Construction for Fire Protection  
3
FIRE 130  Fire Protection Equipment and Systems  
3
FIRE 165  Fundamentals of Fire Protection Chemistry  
3

Elective Courses (Select 15 units)
FIRE 51  Fire Academy Preparation  
2
FIRE 71  Trench Rescue  
5
FIRE 72  Swiftwater Rescue  
5
FIRE 98  Fire Service Skills  
5-5
FIRE 118  Fire Prevention Technology  
3
FIRE 125  Fire Apparatus and Equipment  
3
FIRE 131  Emergency Preparedness  
3
FIRE 132  Fundamentals of Emergency Management  
3
FIRE 133  Disaster Mitigation  
3
FIRE 142  Fire Ethics  
3
FIRE 145  Fire Fighting Tactics and Strategy  
3
FIRE 151  Fire Fighter I Academy  
18
FIRE 152  Driver Operator Academy  
4.5
FIRE 160  Wildland Fire Control I  
3

To satisfy a prerequisite, the student must have earned a letter grade of A, B, C or CR in the prerequisite course, unless otherwise stated. See Catalog addendum at http://www.palomar.edu/catalog/2011/ for updates and new program approvals.