472. Design and Layout  
Winter, Spring. (4-4-0)  
Conceptualization, design, layout and specification of service industry facilities.

473. Operations Research in the Service Industries  
Fall, Spring. Summer of odd-numbered years. (3-3-0) 305; MTA 316.  
Application of marketing and operational research techniques to service industry management problems, emphasizing quantitative and analytical decision models designed for specific operations in this field.

490. Operational Analysis in the Hospitality Industry  
Fall, Spring. (4-4-0) 306; Seniors.  
Advanced management concepts, leading to an understanding of decision theory as applied to directed investigation into specific hospitality operations.

499. Independent Study  
Fall, Winter, Spring, Summer. (1-3-0) to 15(1-0). May re-enroll for a maximum of 15 credits. Approval of school.  
Research in any phase of food, lodging, hospitality or health facilities operations.

811. Policy Formulation and Organization  
Spring. (4-4-0) 875, 898, MGT 806.  
Development of goals, objectives and consistent business policies for the creation of dynamic and effective organizations for all phases of service industries.

865. Economic Implications of Tourism  
Fall. (4-4-0) EC 680 or concurrently.  
Economic, historical, philosophical, psychological, governmental and educational aspects and satisfactions of travel. The promotion of tourism; the business of travel and its relationships to the hospitality industry.

875. Innovation in Hospitality Marketing  
Spring. (4-4-0) MTA 805 or concurrently.  
Changing environment of the hospitality industry is examined and new developments in marketing are analyzed for potential innovative application in the hospitality sector.

888. Financial Management for the Service Industries  
Winter. (4-4-0) AFA 640.  
Covers leasing, franchising, tax considerations, planning to meet financial needs from internal sources or from capital markets, management of current and capital assets, including inventories and operational equipment.

890. Special Problems  
Fall, Winter, Spring. 1 to 15 credits. Approval of school.  
Opportunity for the outstanding student to engage in depth analysis of a service industry area of his choice that will result in a positive contribution to the field.

896. Problems of the Service Industries  
Winter. (4-4-0) 888 or concurrently.  
Formulation of plans based on analysis of situations and trends applying general business principles. Discussion of actual cases with leaders in service industries.

502. Genetics Clinic  
Fall, Winter, Spring, Summer. 1 to 3 credits. May re-enroll for a maximum of 9 credits.  
Students will interview and examine patients with hereditary disorders, perform related laboratory diagnostic procedures, and participate in genetic counseling conferences and discussions.

590. Special Problems in Human Development  
Fall, Winter, Spring, Summer. 1 to 6 credits. May re-enroll for a maximum of 12 credits.  
Selected human development problems, emphasizing quantitative and analytical decision models designed for specific operations in this field.

608. Pediatric Specialty Clerkship  
Fall, Winter, Summer. 1 to 17 credits. May re-enroll for a maximum of 43 credits.  
Clinical experience with pediatric patients under the direction of members of the faculty of the Department of Human Development and community pediatricians. Fall, Saginaw, Winter, Lansing. Spring, Grand Rapids. Summer, Flint.

520. Facilities Programming  
Fall. (4-4-0)  
Application of principles and concepts drawn from many related disciplines to planning and operations of hotels and food production systems, utilizing optimum physical and human resources.

HUMAN DEVELOPMENT H D  
College of Human Medicine  
Fall, Winter, Spring, Summer. 1 to 3 credits. May re-enroll for a maximum of 9 credits.  
Selected human development problems, emphasizing quantitative and analytical decision models designed for specific operations in this field.

201. Contemporary Retail Community (TRA 201.) Fall, Winter, Spring. (3-3-0) Sophomores.  
The retail community as it responds with a supply of goods and services to the needs of the consumer.

203. Selected Non-Textile and Apparel Merchandising (276, TRA 276.) Winter, Spring. (3-0-0) 143.  
Selected non-textile and apparel merchandise as it fulfills consumer needs and expectations.

210. Environmental Design: Space, Color and Texture  
Fall, Winter. (3-3-0) 120 or approval of department.  
Space, color and texture as components of human environment, their effect upon and use by man.

211. Environmental Design: Space, Color and Texture — Laboratory  
Fall, Winter. (3-3-0) 212 concurrently.  
Discussion and demonstration of space, color and texture as components of human environment, their effect upon and use by man.

213. Synthesis of Environmental Design Elements  
Winter, Spring. (3-3-0) 17 credits. May re-enroll for a maximum of 43 credits.  
Clinical experience with pediatric patients under the direction of members of the faculty of the Department of Human Development and community pediatricians. Fall, Saginaw, Winter, Lansing. Spring, Grand Rapids. Summer, Flint.

214. Synthesis of Environmental Design Elements — Laboratory  
Winter, Spring. (3-3-0) 213 concurrently.  
Discussion and demonstration of design elements, space, shape, color and texture, and their organization as they are related to man's near-environment.

220. Interior Space Design  
Fall, Winter. (3-0-6) 210.  
Basic designing and drawing of interior space in relationship to human needs.

221. Interior Color and Texture Design  
Winter, Spring. (3-0-6) 220 or concurrently.  
The manipulation and development of color and texture as components of environmental space design.

222. Basic Interior Design Synthesis  
Fall, Spring. (3-0-6) 222.  
Experimentation and representation of space, color and texture as they relate to environmental interior design.

230. History of Interior Design  
Fall. (3-3-0).  
Historical development of furniture, textiles, and the other decorative arts in relation to interior design and architecture from ancient times to Medieval.

252. Experimental Clothing Construction (TRA 252.) Fall, Winter. (3-2-2) 152 or pass departmental placement examination. Application of principles of clothing construction with emphasis on fitting, alteration and couturier construction techniques. Experimental execution and evaluation of techniques.

254. Contemporary Fashion Analysis  
Fall, Winter. (3-2-2) 143 or approval of department.  
Analysis of fashion as evidence of a dynamic relationship between man and his environment;
costume as an aesthetic expression, a sociological phenomenon, and a coordinating factor for the consumer market.

256. Survey of World Dress  
Fall, Winter, Spring. 3(3-0).  
Secular and ceremonial dress of ethnic, peasant, and folk societies. Emphasis on costume considering its contextual meaning and influence on surrounding cultures.

301. Merchandising: Apparel and Home Furnishing Accessories I  
TRA 301. Winter, Spring. 4(4-0)  
Emphasis on disposable consumer income as it influences the channel of distribution and the consumer market.

302. Clothing and Textiles Production and Distribution  
TRA 302, 402. Fall, Winter. 3(3-0)  
Juniors. Historical development of the foreign and domestic apparel industries. Present organization of the apparel industry in major foreign markets and primary and regional markets in the United States.

320. Interior Design Material and Workroom Practices  
Fall, Winter. 4(3-2) 222.  
The material used to create design in near-environment space and the workroom practices used to accomplish an installation after it has been designed.

322. Interior Lighting Design  
Winter, Spring. 3(2-2) 213, approval of department.  
The basic principles and practices of interior design lighting, light control, distribution, quality and quantity of light as it affects man's near environment.

324. Interior Perspective and Media  
Fall, Winter. 5(0-10) 222 or approval of department.  
The development of methods for designing communicative artifacts through manipulation of three dimensional drawings in many media.

326. Interior Design Problems  
Fall, Spring. 3(0-6) May re-enroll for a maximum of 9 credits. 324 or approval of department.

332. Human Needs in Housing  
Fall, Winter, Spring. 3(2-3).  
Recent and future trends studied as a determinant of the consumer market.

333. Design Illustration  
Fall, Spring. 3(0-6) 143; 222 or 254; or approval of department.  
Development and display of design ideas through visual means. Exercises intended to stimulate design perception and creativity in design illustration. Survey of philosophies as related to design innovation.

355. Design Analysis: Flat Pattern  
TRA 355. Spring. 2(2-2) 253 or approval of department.  
Garment design achieved by flat pattern methods. Problems include fitting a master pattern, designing from a block, pattern cutting and garment construction.

365. Textiles Design  
TRA 365. Fall, Winter, Spring. 3(0-6) 143.  
Two and three dimensional design as applied specifically to textiles already existent.

367. Crafts: Design with Materials  
TRA 382A. Fall, Winter, Spring. 3(0-6) 143.  
Development of creative design and craft techniques for vocational teaching in home economics.

371. Advanced Textiles  
TRA 372A, TRA 372B. Fall, Winter, Spring. 3(3-0) 171; Juniors.  
Recent developments in fibers and textile products. Chemical and physical properties of fibers, yarns, fabrics structures and finishes related to fabric performance.

372. Textiles Laboratory  
TRA 372B. Fall, Winter, Spring. 1(0-2) 171; or concurrently; Juniors.  
Laboratory experience in textile analysis and evaluation.

373. Weaving  
TRA 373. Fall, Winter, Spring. 3(0-6) Approval of department.  
Execution of original designs in the different weaving techniques. Warping of looms and the interpretation and use of drafts for pattern weaving are included.

400H. Honors Work  
TRA 400H. Fall, Winter, Spring, Summer. Variable credit. May re-enroll for a maximum of 16 credits. Seniors; approval of department.

404. Merchandising: Apparel and Home Furnishing Accessories II  
TRA 404. Fall, Spring. 4(4-0) 301.  
Decision making application to the merchandising function. Assortment, merchandising mathematics; methods, procedures, and planning of merchandising budgets. Analysis of management information as provided by electronic data processing and other sources.

405A. Field Study — Retail Operations  
TRA 405A. Fall, Winter, Spring. 4(2-4) 301; Senior majors; 301; additional rolling experience and approval of department.  
An off-campus supervised and coordinated field-study program in selected retail operations.

405B. Special Problems in Retailing Fieldwork  
TRA 405B. Fall, Summer. Variable credit. May re-enroll for a maximum of 4 credits. Approval of department required.  
A special problem investigation designed to supplement classroom and field-study experience.

405C. Exploration of the Textile and Apparel Industries  
Spring. 4 credits.  
An aggregate analysis through field-travel of the distribution channel identifying function and service areas at they coordinate merchandise flow, from production to consumption.

420. Professional Practices — Interior Design  
Fall, Winter. 3(3-0) 290.  
The professional practices, standards, and ethics involved in the practice of interior design.

421. Interior Design — Residential  
Winter, Spring. 4(1-6) 420 or concurrently.  
Advanced interior design and planning with emphasis on communication with the residential client. Oral and graphic presentations of problem solving for environmental control.

423. Interior Design — Contract  
Fall, Spring. 4(1-6) 420 or concurrently.  
Advanced interior design and planning in contract types of design (commercial and institutional). Emphasis on methods of researching a design problem by the group or team method.

425. Three Dimensional Structure and Construction  
Fall, Winter. 3(0-6) 353.  
Various types of building structures and their method of construction as they are related to interior design. Presentation methods of three dimensional spaces relationships by designing and building scale models.

427. Advanced Design Problems  
Winter, Spring. 3(0-6) 425 or concurrently.  
Advanced structural investigation, analysis, solution, and presentation relative to physical aspects of interior design.

430. History of Interior Design — Rococo through Victorian  
Spring. 3(3-0) 330 or approval of department.  
Historical development of furniture, textiles, and the other decorative arts in relation to interior architecture from the Rococo era through the Victorian era.

431. History of Interior Design — Modern  
Spring. 3(3-0)  
Historical development of furniture, textiles, and accessories and their relationship to interiors; from the Victorian era to the present.

432. Man and His Shelter  
TRA 432. Fall, Spring. 3(3-0)  
Interdepartmental with and administered by Urban Planning.  
Interdisciplinary approach to man and his shelter; role of shelter in the community, housing as a cultural, economic, and institutional force; future developments and needs.

434. Clothing for Man  
TRA 434. Fall, Winter. Summer of even-numbered years. 3(3-0) Juniors.  
Sociocultural study of clothing as an artifact and symbol in Western and non-Western societies. Analysis of functions, cultural patterns, social organization, and sociocultural change.

435. Psychology of Clothing  
Spring. 3(3-0) Juniors; PSY 170.  
Clothing as it relates to self expression and the individual's adjustment to the physical and social environment.

436. Field Study in Family Housing  
Fall, Winter, Spring. 4(2-4) 332.  
The relationship of interior environment to the realization of family goals and values. Students help the family understand the dynamics of this relationship.

455. Design by Draping  
TRA 455. Winter of even-numbered years. 3(1-4) 233, 254, 353.  
459. Special Problems in Clothing
   (TRA 459.) Fall, Winter, Spring.
   Summer. 2 to 4 credits. Two courses in clothing construction; approval of department.

472. Textiles within an Ecological Framework
   Fall, Winter, Summer. 2 to 3 credits. May re-enroll for maximum of 6 credits. Approval of department.

473. Textile Economics
   Spring. 3(3-0) 171; EC 201.

475. History of Apparel Textiles
   Fall. 3(0-0) Juniors.

476. Clothing and Textiles in World Trade
   Winter. 3(0-0) EC 201.

483. History of Costume: Western Dress
   (TRA 483.) Winter. 3(3-0) Juniors.

490. Problems in Human Environment and Design
   (TRA 490.) Fall, Winter, Spring.
   Summer. Variable credit. May re-enroll for a maximum of 6 credits. Approval of department.

498. Field Study
   Fall, Winter, Spring. 4 to 8 credits. May re-enroll for a maximum of 8 credits. Approval of department.

800C. Seminar in Human Environment and Design
   (TRA 800C.) Fall, Winter, Spring.
   Summer. of even-numbered years. 3(3-0) May re-enroll for a maximum of 9 credits. Six credits in design or crafts.

800D. Seminar in Psycho-Social-Cultural Aspects of Clothing
   (TRA 800D.) Winter. Summer of even-numbered years. 3(3-0) May re-enroll for a maximum of 9 credits. Approval of department.

809C. Research Methods in Human Environment and Design
   (TRA 809C.) Fall, Winter, Spring.
   Variable credit. May re-enroll for a maximum of 9 credits. Approval of department.

813A. Special Problems in Textiles
   (TRA 813A.) Fall, Winter, Spring.
   Summer. Variable credit. May re-enroll for a maximum of 9 credits. Approval of department.

813B. Special Problems in Clothing
   (TRA 813B.) Fall, Winter, Spring.
   Summer. Variable credit. May re-enroll for a maximum of 9 credits. Approval of department.

813C. Special Problems in Related Arts
   (TRA 813C.) Fall, Winter, Spring.
   Summer. Variable credit. May re-enroll for a maximum of 9 credits. Approval of department.

813D. Special Problems in Sociological, Psychological or Economic Aspects of Clothing
   (TRA 813D.) Fall, Winter, Spring.
   Summer. Variable credit. May re-enroll for a maximum of 9 credits. Approval of department.

815. Literature in Clothing and Textiles
   (TRA 815.) Fall. Summer of even-numbered years. 3(3-0) Approval of department.

836. Research and Developments in Textiles
   (TRA 836.) Winter. 3 to 5 credits.

840. Garment Design Analysis and Application of Flat Pattern Principles to Advanced Design
   (TRA 840.) Spring. 3(1-4) Six credits in clothing construction.

889. Research
   (TRA 889.) Fall, Winter, Spring.
   Summer. Variable credit. Approval of department.

HUMANITIES — Human Environment and Design

University College

Students may earn credit in only one of the courses in each of the following three groups:

1. 201, 211, 220, 231, 261, 261H
2. 202, 212, 222, 232, 262, 262H
3. 203, 213, 233, 233, 263, 263H

152. Introduction to Humanities: The Performing Arts
   Fall, Winter. 4(3-2) Primarily for Freshmen. Purchase of a limited number of tickets is required.

159. Humanities: The Greek World
   Fall, Winter. 2(3-0) Students may not earn credit in 199 and 201. Sophomores; ATL 101, or approval of department.

200. Humanities: The Roman World
   Winter. Spring. 2(3-0) Students may not earn credit in 200 and 201. Sophomores; ATL 101, or approval of department.

201. Humanities in the Western World
   (241A.) Fall, Winter, Spring. 4(4-0) Sophomores.

202. Humanities in the Western World
   (242A.) Fall, Winter, Spring, 4(4-0) Sophomores, 201 preferred; or 211, 221, 231, or 261, or 261H.

203. Humanities in the Western World
   (243A.) Fall, Winter, Spring, 4(4-0) Sophomores, 212, 222, 232, 262, or 262H.

211. Humanities: Great Books of Western Culture
   (241B.) Fall. 4(4-0) Sophomores.

212. Humanities: Great Books of Western Culture
   (242B.) Winter. 4(4-0) Sophomores, 211 preferred; or 201, 221, 231, 261, or 261H.

Emphasizes selected major works of literature, philosophy, religion, history, and art and in an interdisciplinary study of the origins of Western culture in the civilizations of Greece and Rome and in the Judeo-Christian tradition. Uses selected paperbacks, history and art texts.

219. Humanities: Great Books of Western Culture
   (243B.) Winter. 4(4-0) Sophomores, 201 preferred; or 212, 222, 232, 262, or 262H.

Emphasizes selected major literary, philosophical, religious, historical and artistic works of the medieval and early modern periods of Western culture.