

- HART 2441 Commercial Air Conditioning & Refrigeration** 4.2.8
The student will demonstrate knowledge of systems components; diagnose and troubleshoot systems; describe system application and demonstrate system installation procedures. Fee charged. Prerequisite: instructor approval.
- HART 2445 Air Conditioning System Design** 4.2.8
A study of the properties of air and results of cooling, heating, humidifying or dehumidifying; ACCA Manual J heat gain and heat loss calculations including equipment selection, ACCA Manual D duct design and balancing the air system. Fee charged. Prerequisite: instructor approval.
- HART 2449 Heat Pumps** 4.2.8
A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow and other topics related to heat pump systems. Fee charged. Prerequisite: instructor approval.

Art

Suggested Course of Study for University Transfer Students (62-73 Credit Hours)

Freshman Year	Sophomore Year
ARTS 1301	ARTS 1303
ARTS 1311	ARTS 2323 or ARTS 2324
ARTS 1312	ARTS Electives 22xx or 23xx
ARTS 1316 or ARTS 2323	(2-6 Credit Hours)*
ENGL 1301	Computer (3-4 Credit Hours)
ENGL 1302	GOVT 2305
HIST 1301	GOVT 2306
HIST 1302	Humanities (3 Credit Hours)
Lab Science (8 Credit Hours)	PHED 1134
MATH 1314	Social/Behavioral Science
PHED Activity (1 Credit Hour)	(3 Credit Hours)
	SPCH 1315 or 1321

*Studio Courses in the sophomore year should be selected according to the degree requirements of the university to which the student plans to transfer.

- ARTS 1301 Art Appreciation (50.0703.51 26)** 3.3.0
A general education course open to all; the subject matter is designed to give the layman an overview of how to look at art and a basic understanding of what is involved in the analysis and appreciation of any particular work of art. Core Curriculum satisfied for Visual and Performing Arts.

- ARTS 1303 Art History I (50.0703.52 26) 3.3.0**
The study of painting, sculpture, architecture and minor arts from the beginning of record history through the middle ages. Core Curriculum satisfied for Visual and Performing Arts.
- ARTS 1304 Art History II (50.0703.52 26) 3.3.0**
Continuation of ARTS 1301, the Renaissance to the present. Core Curriculum satisfied for Visual and Performing Arts.
- ARTS 1311 Design I (50.0401.53 26) 3.2.4**
Fundamental art principles applied to the elements of line, space, shapes, form, value and color. Emphasis on two dimensional designs. Fee charged.
- ARTS 1312 Design II (50.0401.53 26) 3.2.4**
Art principles applied to the study of line, form, space and texture in three dimensional materials and concepts. Fee charged.
- ARTS 1316 Drawing I (50.0705.52 26) 3.2.4**
A beginning course with emphasis on a variety of processes designed to enhance perceptual and descriptive skills. Exploration of the form through the contour line, gesture and modeled drawing. Fee charged.
- ARTS 1317 Drawing II (50.0705.52 26) 3.2.4**
Expansion of Drawing I, with emphasis on expressive and conceptive aspects of drawing, including the human figure. Fee charged. Prerequisite: ARTS 1316 or consent of instructor.
- ARTS 2189 Academic Cooperative (1 SCH version) (24.0103.52 12) 1.0.3**
An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of studio art and/or art history.
- ARTS 2289 Academic Cooperative (2 SCH version) (24.0103.52 12) 2.0.4**
An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of studio art and/or art history.
- ARTS 2311 Design III (50.0401.53 26) 3.3.3**
An introduction to the perception, properties and theories of color and their application in design and technology. Additive, subtractive and particulate theories will be studied and applied to studio oriented design assignments. Fee charged. Prerequisite: ARTS 1311.
- ARTS 2316 Painting I (50.0708.52 26) 3.2.4**
Beginning processes and theories of painting media. Emphasis on color and

composition. Fee charged. Prerequisites: ARTS 1317, 2317 or consent of instructor.

- ARTS 2317 Painting II (50.0708.52 26) 3.2.4**
Expansion of Painting I, with emphasis on individual expression. Fee charged. Prerequisite: ARTS 2316 or consent of instructor.
- ARTS 2323 Life Drawing I (50.0705.53 26) 3.2.4**
A studio course emphasizing structure and action of the human figure. Fee charged. Prerequisite: ARTS 1316.
- ARTS 2324 Life Drawing II (50.0705.53 26) 3.2.4**
A continued investigation of drawing with emphasis on individual expression. Fee charged. Prerequisite: ARTS 2323.
- ARTS 2326 Sculpture I (50.0709.51 26) 3.2.4**
Introduction to sculpture media including wood, clay, metal, stone and plaster with emphasis being placed on basic three dimensional designs. Fee charged. Prerequisite: ARTS 1312 or consent of instructor.
- ARTS 2327 Sculpture II (50.0709.51 26) 3.2.4**
Further exploration of sculptural materials, techniques and design. The student is given freedom to explore materials compatible with ideas and designs of his/her own choosing. Fee charged. Prerequisite: ARTS 2326 or consent of instructor.
- ARTS 2341 Arts Metals I (50.0713.51 26) 3.3.3**
An exploration of the characteristics of metal while being shaped, jointed, textured and ornamented in the construction of art and craft forms. Fee charged. Prerequisite: ARTS 1311 or consent of instructor.
- ARTS 2342 Arts Metals II (50.0713.51 26) 3.3.3**
Continued exploration of the workability of metal, using advanced techniques of forming, fusing, texturing and enameling to construct more complex art forms. Fee charged. Prerequisite: ARTS 2341 or consent of instructor.
- ARTS 2346 Ceramics I (50.0711.51 26) 3.2.4**
Introduction to basic clay processes. Raku, and low and high fire. Emphasis is placed on hand building techniques, introduction to the use of the potter's wheel and basic glaze formation. Fee charged.
- ARTS 2347 Ceramics II (50.0711.51 26) 3.2.4**
Advanced techniques in clay works with emphasis on furthering wheel throwing and/or hand building skills and glaze formulation. Raku, and low and high fire. Fee charged. Prerequisite: ARTS 2346 or consent of instructor.

- ARTS 2348 Digital Art I** 3.1.2
A studio course that introduces the potential of the computer hardware and software medium for visual, conceptual and practical uses in the visual arts. Prerequisite: ARTS 1316, ARTS 1311 or consent of instructor. Fee charged.
- ARTS 2349 Digital Art II** 3.1.2
A studio course using computer hardware and software as a medium for visual and conceptual expression in the visual arts. Prerequisite: ARTS 1316, ARTS 1311, ARTS 2348, or consent of instructor. Fee charged.
- ARTS 2356 Photography I (50.0605.51 26)** 3.2.4
An introduction to the digital camera, digital software and image printing. Assignments are designed to implement basic camera controls and compositional techniques. Fee charged.
- ARTS 2357 Photography II (50.0605.52 26)** 3.2.4
Further exploration into photography with the digital camera, including experimentation and refinement of the final print and digital software technology. Fee charged.
- ARTS 2389 Academic Cooperative (3 SCH version) (24.0103.52 12)** 3.2.4
An instructional program designed to integrate on-campus study with practical hands-on work experience. In conjunction with class seminars, the individual student will set specific goals and objectives in the study of studio art and/or history.

Biology

Biology, Pre-Dental, Pre-Medical or Pre-Veterinary Medicine majors

Suggested Course of Study for University Transfer Students (60-63 Credit Hours)

Freshman Year	Sophomore Year
BIOL 1406	(BIOL 2420 - Health/Nursing Related)
BIOL 1407	CHEM 1411
ENGL 1301	CHEM 1412
ENGL 1302	GOVT 2305
HIST 1301	GOVT 2306
HIST 1302	(MATH 1316)*
(MATH 1314)*	MATH 2413
PHED 1134	PHYS 1401
PHED Activity (1 Credit Hour)	Visual/Fine Arts (3 Credit Hours)
Social/Behavioral Science	Humanities (3 Credit Hours)
(3 Credit Hours)	
SPCH 1315 or 1321	