

- HIST 2301 History of Texas (45.0802.52 25) 3.3.0**  
A history of Texas from the Spanish period to the present day. Emphasis will be placed upon the period of Anglo-American settlement, the revolution, the development of the modern state, war with Mexico, Civil War and Reconstruction. Core Curriculum satisfied for U.S. History.
- HIST 2311 The History of Western Civilization (45.0801.54 25) 3.3.0**  
A survey of the social, economic, political, and intellectual developments in Europe through the time of the Renaissance. Emphasis is placed on the Protestant Reformation, the struggle for parliamentary government in England, acquisition of colonies, and the cultural heritage acquired from Europe by the New World. Core Curriculum satisfied for Social and Behavioral Science.
- HIST 2312 The History of Western Civilization (45.0801.54 25) 3.3.0**  
A survey of the social, economic, political, and intellectual developments in Europe from the Renaissance to the present. Emphasis is placed on the French Revolution, the Napoleonic period, territorial expansion, World War I, World War II, and post-war developments. Core Curriculum satisfied for Social and Behavioral Science.

## Horology

The Texas Institute of Jewelry Technology at Paris Junior College is known for excellence in watchmaker training. The need for qualified watchmakers has never been greater. In the last decades, sales of fine mechanical timepieces have doubled and sales of precious metal watches were up. With the right education, countless options are available for the watchmaker in after-sales-service, antique restoration, and in related micro-technical fields. Horology Technology is a four-semester program starting each fall, spring, and summer. Students can earn certificates or an AAS degree in Horology Technology. Program content covers watch repair, material systems, automatics, calendars, timers, chronographs, electric watches, accutrons, digital, step motor quartz, and lathe work. History and business applications are included in the curriculum.

All TIJT programs require a deposit of \$100.00 to reserve a bench station. This deposit will be applied toward the required tool kit and is refundable only if written cancellation is received by the following dates:

**Fall Semester:** July 15  
**Summer Semester:** April 1  
**Spring Semester:** Dec. 1

If possible, prospective students are encouraged to tour the PJC campus and the TIJT division and/or request complete information and cost packet. You may schedule a tour or request an information packet by calling 903.782.0380 or 1.800.232.5804. To receive a certificate in this program, a grade of "C" or better must be maintained in all courses.

## AAS Horology Technology (72 Credit Hours)

Freshman Year	Sophomore Year
PSYC 1100 or EDUC 1100	HRGY 2305
HRGY 1319	HRGY 2306
HRGY 1320	HRGY 2307
HRGY 1321	HRGY 2308
HRGY 1322	GOVT 2306
MATH 1314	COSC 1401
HRGY 2301	HRGY 2341
HRGY 2302	HRGY 2342
HRGY 2303	HRGY 2343
HRGY 2304	HRGY 2344
Visual/Fine Arts Elective	SPCH 1321
ENGL 1301	HRGY 1417

**CERTIFICATE IN FINE MECHANICAL WATCH REPAIR**

(41 Credit Hours)

**First Semester**

PSYC 1100 or EDUC 1100 .....	Learning Frameworks
HRGY 1319 .....	Basic Horology I
HRGY 1320 .....	Basic Horology II
HRGY 1321 .....	Basic Horology III
HRGY 1322 .....	Basic Horology IV
HRGY 1417 .....	Applied Jewelry Practices

**Second Semester**

HRGY 2301 .....	Intermediate Horology I
HRGY 2302 .....	Intermediate Horology II
HRGY 2303 .....	Intermediate Horology III
HRGY 2304 .....	Intermediate Horology IV

**Third Semester**

HRGY 2307 .....	Intermediate Horology VII
HRGY 2308 .....	Intermediate Horology VIII
HRGY 2341 .....	Advanced Horology Systems I
HRGY 2342 .....	Advanced Horology Systems II

**CERTIFICATE IN HOROLOGY TECHNOLOGY**

53 credit hours

**First Semester**

PSYC 1100 or EDUC 1100 .....	Learning Frameworks
HRGY 1319 .....	Basic Horology I
HRGY 1320 .....	Basic Horology II
HRGY 1321 .....	Basic Horology III
HRGY 1322 .....	Basic Horology IV

**Second Semester**

HRGY 2301 .....	Intermediate Horology I
HRGY 2302 .....	Intermediate Horology II
HRGY 2303 .....	Intermediate Horology III
HRGY 2304 .....	Intermediate Horology IV
HRGY 1417 .....	Applied Jewelry Practices

**Third Semester**

HRGY 2305 .....	Intermediate Horology V
HRGY 2306 .....	Intermediate Horology VI
HRGY 2307 .....	Intermediate Horology VII
HRGY 2308 .....	Intermediate Horology VIII

**Fourth Semester**

HRGY 2341 .....	Advanced Horology Systems I
HRGY 2342 .....	Advanced Horology Systems II
HRGY 2343 .....	Advanced Horology Systems III
HRGY 2344 .....	Advanced Horology Systems IV

- HRGY 1301 Jewelry Techniques I 3.1.8**  
An introduction to the proper use and care of hand tools along with industry terminology, skill development in layout, sawing, filing, drilling, and hand-finishing to industry standard. Prerequisite: None. Fee charged.
- HRGY 1302 Jewelry Techniques II 3.1.8**  
Continuation of Jewelry Techniques I. Introduction to machine-polishing flat and curved surfaces. Prerequisite: Completion of HRGY 1301. Fee charged.
- HRGY 1303 Jewelry Techniques III 3.1.8**  
Continuation of Jewelry Techniques II with emphasis on rolling mill and wire drawing techniques, torch-soldering, and ring fabrication. Prerequisite: Completion of HRGY 1302. Fee charged.
- HRGY 1304 Jewelry Techniques IV 3.1.8**  
Continuation of Jewelry Techniques III with emphasis on chain making, catch construction, ring sizing, and mass finishing. Prerequisite: Completion of HRGY 1303. Fee charged.
- HRGY 1309 Casting I 3.1.8**  
An introduction to the lost wax casting process using centrifugal and vacuum methods with emphasis on proper spruing, investing, and burnout techniques. Prerequisite: None. Fee charged.
- HRGY 1313 Fundamental Gemology I 3.1.8**  
Development of skills in the use and proper care of laboratory instruments; colored stones, gem identification, synthetics, enhancement/treatments. Prerequisite: None. Fee charged.

- HRGY 1314 Fundamental Gemology II** 3.1.8  
The continuation of Fundamental Gemology II, with additional study in the formation, recovery, lore/superstition and marketing of gems. Prerequisite: Completion of HRGY 1313. Fee charged.
- HRGY 1319 Basic Horology I** 3.1.8  
Introduction to disassembly, cleaning, and reassembly of the basic watches using time proven methods. Emphasis on nomenclature.  
Prerequisite: None. Fee charged.
- HRGY 1320 Basic Horology II** 3.1.8  
A continuation of Basic Horology I. Emphasis on material systems and identification of watch movement manufactures and the functions and parts common to all mechanical watches. Prerequisite: Completion of HRGY 1319. Fee charged.
- HRGY 1321 Basic Horology III** 3.1.8  
A continuation of Basic Horology II. Emphasis on balance staff fitting and poising balance wheels. Prerequisite: Completion of HRGY 1320. Fee charged.
- HRGY 1322 Basic Horology IV** 3.1.8  
A continuation of Basic Horology III. Emphasis on balance staff replacement, use of timing machines and hairspring pinning. Prerequisite: Completion of HRGY 1321. Fee charged.
- HRGY 1341 Stone Setting I** 3.1.8  
Introduction to stone setting, topics include the American Brilliant-cut stone, hand tools for the stone setter, beginning burring and setting techniques for prong, bead and bright cut settings. Prerequisite: Completion of HRGY 1349. Fee charged.
- HRGY 1342 Stone Setting II** 3.1.8  
A continuation of Stone Setting I with emphasis on prong setting and the repair of prong setting including repringing, retipping, and rebeading. Prerequisite: Completion of HRGY 1341. Fee charged.
- HRGY 1343 Stone Setting III** 3.1.8  
A continuation of Stone Setting II. Course work includes fancy bright-cutting techniques such as double millgrain, and multiple stones setting into channel, cluster, and fishtail mountings. Prerequisite: Completion of HRGY 1342. Fee charged.
- HRGY 1344 Stone Setting IV** 3.1.8  
A continuation of Stone Setting III with emphasis on multiple stone bright cuts, star cuts, and the fabrication and setting of an oval and a rectangular bearing bezel pendant. Prerequisite: Completion of HRGY 1343. Fee charged.

- HRGY 1348 Jewelry Repair/Fabrication I** 3.1.8  
Course work includes jewelry repair techniques such as sizing, half-shanking, prong, hinge, and chain repair. Prerequisite: Completion of HRGY 1304. Fee charged.
- HRGY 1349 Jewelry Repair/Fabrication II** 3.1.8  
A continuation of Jewelry Repair/Fabrication I with emphasis on advanced jewelry fabrication, including the fabrication of a cluster pendant. Course work includes introduction to plating equipment and plating techniques. Prerequisite: Completion of HRGY 1348. Fee charged.
- HRGY 1350 Intermediate Gemology** 3.1.8  
A continuation of Fundamental Gemology II, with additional study in the species and varieties of gems. Prerequisite: Completion of HRGY 1314. Fee charged.
- HRGY 1371 Introduction to Computer Aided Jewelry Design** 3.1.8  
Study of the programs, operations, characteristics, modeling, and machining techniques of Computer Aided Design (CAD), Computer Aided Manufacturing (CAM) are explored in this course. Applications in visualization, rendering, animation, 2D design, 2 ½ D design and solid modeling, 3D design and solid modeling. Prerequisite: Basic computer skills and applications or consent of instructor. Fee charged
- HRGY 1372 Technical Illustration for Jewelry Design** 3.1.8  
Topics include pictorial drawing including isometrics, obliques, perspectives, charts, and graphs; shading and transfer lettering; and use of different media. Prerequisite: Completion of HRGY 1371. Fee charged.
- HRGY 1373 Basic Computer Aided Drafting for Jewelry Design** 3.1.8  
An introduction to computer-aided drafting. Emphasis is placed on drawing setup; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; as well as input and output devices. Prerequisite: Completion of HRGY 1372. Fee charged.
- HRGY 1374 Solid Modeling Design for Jewelry** 3.1.8  
A computer-aided modeling course, contents covers the development of three-dimensional drawings and models from sketches and orthographic drawings and utilization of three-dimensional models in design work. Prerequisite: Completion of HRGY 1373. Fee charged.
- HRGY 1375 Computer Integrated Manufacturing for Jewelry** 3.1.8  
Concepts of CIM are introduced. Emphasis is placed on using computers to automate a total manufacturing system. Hands-on experiences integrating CAD/CAM, robotics, fluid power, CNC machines, vision systems, and recognition equipment. Prerequisite: Completion of HRGY 1374. Fee charged.

- HRGY 1391 Industrial Casting** 3.1.8  
This course introduces the concepts of industrial casting. Emphasis is on large tree casting, mold making, and mass manufacturing, includes advanced wax carving. Prerequisite: Completion of HRGY 2333 or consent of instructor. Fee charged.
- HRGY 1417 Applied Jewelry Practices** 4.3.4  
A survey of business practices pertaining to the jewelry industry. Emphasis is placed on communication skills, security, insurance, copyright/trademark law, industry organizations, and common ethical expectations within the industry. Prerequisite: None.
- HRGY 2301 Intermediate Horology I** 3.1.8  
Introduction to the theory, function, and repair of watch escapements. Emphasis on roller jewels, pallet stones, guard fingers, pallet arbors, and adjustment of the detached lever escapements in watches. Prerequisite: Completion of HRGY 1322. Fee charged.
- HRGY 2302 Intermediate Horology II** 3.1.8  
Continuation of Intermediate Horology I. Emphasis on hairsprings in the watch including overcoils and friction jewellery. Prerequisite: Completion of HRGY 2301. Fee charged.
- HRGY 2303 Intermediate Horology III** 3.1.8  
Continuation of Intermediate Horology II. Emphasis on overhaul procedures on the standard watch and the Sixteen Point Check System. Prerequisite: Completion of HRGY 2302. Fee charged.
- HRGY 2304 Intermediate Horology IV** 3.1.8  
A continuation of Intermediate Horology III. Emphasis on vibrating a hairspring, adjusting overcoils and dynamic timing. Prerequisite: Completion of HRGY 2303. Fee charged.
- HRGY 2305 Intermediate Horology V** 3.1.8  
A continuation of Intermediate Horology IV. Emphasis on shaping and sharpening watchmakers gravers and use of the watchmakers lathe to turn square shoulder pivots. Prerequisite: Completion of HRGY 2304. Fee charged.
- HRGY 2306 Intermediate Horology VI** 3.1.8  
A continuation of Intermediate Horology V. Emphasis on use of the watchmakers lathe to turn conical pivots, balance staffs, and stems. Prerequisite: Completion of HRGY 2305. Fee charged.
- HRGY 2307 Intermediate Horology VII** 3.1.8  
A continuation of Intermediate Horology VI. Emphasis on the use of the watchmakers lathe to make a stem to fit a watch, balance staff removal, burnishing pivots, and the use of the Jacot tool. Prerequisite: Completion of HRGY 2306. Fee charged.

- HRGY 2308 Intermediate Horology VIII 3.1.8**  
A continuation of Intermediate Horology VII. Emphasis on speed and quality to meet industry standards. Focus on disassembly, cleaning, and repair of automatic and calendar watches, and on precision timing including nomenclature, parts interchangeability, proper lubrication, and casing. Prerequisite: Completion of HRGY 2307. Fee charged.
- HRGY 2331 Advanced Gemological Practices 3.1.8**  
Development of skills in the identification of plotting various enhancements and treatments, and grading of diamonds. Prerequisite: Completion of HRGY 1350. Fee charged.
- HRGY 2333 Casting II 3.1.8**  
Continuation of Casting I. Includes mold making and mass finishing. Prerequisite: Completion of HRGY 1309. Fee charged.
- HRGY 2335 Precious Metals I 3.1.8**  
Introduction to precious metals. Course work includes casting in 14K yellow and white gold, prong and bead setting of round stones with emphasis on utilization of commercial shop guidelines. Prerequisite: Completion of HRGY 1344. Fee charged.
- HRGY 2336 Precious Metals II 3.1.8**  
A continuation of Precious Metals I. Course work includes casting in 14K yellow and white gold, channel-setting rounds, graduated rounds, and baguettes. Prerequisite: Completion of HRGY 2335. Fee charged.
- HRGY 2337 Precious Metals III 3.1.8**  
A continuation of Precious Metals II. Course work includes casting in 14K yellow and white gold, assembly of cast and die-struck findings, setting marquise, pear, emerald-cut stones. Prerequisite: Completion of HRGY 2336. Fee charged.
- HRGY 2338 Precious Metals IV 3.1.8**  
A continuation of Precious Metals III. Course work includes casting in 14K yellow and white gold, fabrication of 14K gold and platinum, pave-style stone setting, and electroplating, emphasis is placed on the refinement of skills with a general review of all bench techniques taught in the previous semesters with focus on speed and industry standard. Students take the “Jewelers of America” certification exam for bench jewelers. Prerequisite: Completion of HRGY 2337. Fee charged.
- HRGY 2341 Advanced Horology Systems I 3.1.8**  
Course work includes lectures, demonstrations and practical hands-on training during the study of disassembly, cleaning, and repair and adjustment of timers and simple chronographs. Prerequisite: Completion of HRGY 2308. Fee charged.

- HRGY 2342 Advanced Horology Systems II** 3.1.8  
A continuation of Advanced Horology Systems I. Emphasis on disassembly, cleaning, repair, and adjustment of multi-function mechanical movements and automatic and calendar chronographs.  
Prerequisite: Completion of HRGY 2341. Fee charged.
- HRGY 2343 Advanced Horology Systems III** 3.1.8  
A continuation of Advanced Horology Systems II. Emphasis on electronic theory related to quartz analog timepieces.  
Prerequisite: Completion of HRGY 2342. Fee charged.
- HRGY 2344 Advanced Horology Systems IV** 3.1.8  
A continuation of Advanced Horology Systems III. Emphasis on multi function quartz analog and quartz digital time pieces. Elective projects can include electronic tuning fork watches. This course is a culmination of all learned skills to prepare an individual for a career in the watch making industry. Prerequisite: Completion of HRGY 2343. Fee charged.
- HRGY 2430 Jewelry Arts**  
Study of cold working methods and the malleability of non-ferrous metals using chasing and repoussé, raising and forming techniques along with the fusion methods such as granulation, mokume and the application of enamels in the design of jewelry and/or small metal objects.

## Jewelry

The Texas Institute of Jewelry Technology at Paris Junior College has enjoyed a reputation for teaching excellence since it opened in 1942. This highly acclaimed division of PJC is well known for a diverse student body that includes students from around the world.

While TIJT prides it self on the state-of the-art instruction, the Jewelry program is also well known for teaching time honored techniques such as bead-set/bright cut and pave. TIJT can help the student gain the competitive edge in the dynamic field of Jewelry Technology, as well as prepare them for an exciting career by working at personalized work stations supervised by instructors who are professional jewelers.

Jewelry Technology is a four-semester program starting each fall, spring, and summer. Students can earn a certificate or an AAS degree in Jewelry Technology. Program content includes the optimal use of tools and equipment, hand finishing and machine polishing, forming and fabrication, jewelry repair, wax carving, casting, stone setting round and fancy-cut stones, and working with gold and platinum.

At the end of the program, students will take the “Jewelers of America” certification exam for bench jewelers.

All TIJT programs require a deposit of \$100 to reserve a bench station. This deposit will be applied toward the required tool kit and is refundable only if written cancellation is received by the following dates: