



Section 1. Proposed Course Outline (A general statement of course content that informs class syllabus construction. Once approved, all sections of a given course must include this content, no matter which instructor teaches the course, or the mode of delivery. Divisions must include this new course outline in the Divisional Course Outline binder as required by COPPs.)

Course Number: RTEC 105 Full Course Title for print catalog: Intro to Advanced Technology

Abbreviated Course Title for Banner: Intro to Advanced Technology (30 character limit)

Prerequisites:

Co-requisites:

Grade Option: X Graded (with P/NP option) ☐ Pass/No Pass only

Number/Type Credits	Term Minimum Contact	Term Maximum Contact	11-Week Term Contact
__ Lecture	__ hours (lecture credits x 10)	__ hours (lecture credits x 12)	__ hours (lecture credits x 11)
<u>3</u> Lec/Lab	<u>60</u> hours (lec-lab credits x 20)	<u>72</u> hours (lec-lab credits x 24)	<u>66</u> hours (lec-lab credits x 22)
__ Lab	__ hours (lab credits x 30)	__ hours (lab credits x 36)	__ hours (lab credits x 33)
<u>3</u> Total credits (sum)	<u>60</u> Total hours (sum)	<u>72</u> Total hours (sum)	<u>66</u> Total hours (sum)

Course Description (300 character limit): The intent of this class is to introduce students to the Advanced Technology Division at Lane Community College. Areas of discussion will be Apprenticeship, Auto Body and Paint, Automotive Technology, Aviation Academy, Construction, Diesel Technology, Drafting, Electronics, Fabrication and Welding, Manufacturing, and Sustainability Coordinator. The course will also include basic skills exposure in areas required to be successful in many of the Advanced Technology courses such as: Basic Electricity, Basic Hydraulics, Basic Pneumatics, Precision Measurement, and Mechanical Fabrication.

Course Outcomes and Proficiencies

What will the student **know** or **be able to do** at the end of the course?

What **attitudes** related to the subject will the student hold?

Upon successful completion of this course, the student will:

The student will be able to describe the different aspects and requirements needed to be a student and technician in all the different programs that lead to careers in the Advanced Technology Division. The student will be better prepared to make career choices.

The student will have a basic understanding of skills required to be a successful technician in Hydraulics, Electricity, Pneumatics, Precision Measurement, and Mechanical Fabrication.

The student will have an understanding of the applications of math and reading as a technician.

Assessments Planned

What evidence will demonstrate that students have achieved course outcomes? (assessment tools may include departmental tests, written products, portfolios, juried performances, quizzes and exams, or alternative assessments such as qualitative studies, capstone projects, external reviewers, etc.)

How each outcome will be assessed:

Written exams, Papers requiring fact finding on different careers associated with these programs

Competency based evaluation through Computer based instruction and instructor project evaluation.

The student will have be able to identify the proper tools for a task and demonstrate their safe use.	Oral examination and competency during projects
The student will be able to identify a safe work environment	Observation of students working in a shop environment.

Course Content by Major Topics

What topics will be presented? What are the main activities of the course? What are the central themes? (See sample at <http://www.lanecc.edu/cops/format3.htm>.)

Topics:

Career Exploration: Overview of Apprenticeship, Auto Body and Paint, Automotive Technician, Construction, Diesel Technology, Drafting, Electronics Technician, Manufacturing Technician, Sustainability Coordinator, Flight Technology, and Aviation Maintenance. Overview will include daily routines in these jobs, Expectations of employees, Special skills required, availability of jobs and Wages.

Basic Skills: Basic Hydraulics, Basic Pneumatics, Basic Electricity, Precision Measurement and Mechanical Fabrication. These skills are taught to a basic level of understanding using lecture and hands on projects.

Section 2. Proposal Information

Course Developer:

Paul Croker

Date: 8-24-11

Catalog year to take effect:

2012-13

Type of Proposal

☒ New course

☐ Currently 199 or 299

☐ Experimental Course

199 Special Studies

☐ 299 Trends

☐ Revised course (If increasing credits, use credit change form)

☐ Reactivated course with no change

☐ Reactivated course with changes

Type of Course:

☐ Lower Division Collegiate (transfer)

☒ Professional/Technical (required or elective)

☐ Developmental, numbered below 100

Rationale:

How does this proposal further the goals of the program or department?

Helps students to be better prepared for the rigors of Advanced Technology Programs. Many students come to the Advanced Technology Division (ATD) with little or no knowledge of the basics involved with being a technician such as: Basic Electricity, Basic Hydraulics, Basic Pneumatics, Precision Measurement, and Mechanical Fabrication. This course also provides an overview of each program offered in ATD with presentations by industry professionals and instructors.

What assessment evidence supports this proposal?

Pretesting of students at the beginning of Diesel Electrical, Hydraulics. All of the courses in ATD have to start with the very basics including math. This will help students be successful through entry into technical fields.

How do you know there is a demand for this course?

All but two of the local High Schools have dropped their mechanical programs so students are no longer exposed to the possibilities or skill involved with these types of careers. We have a tremendous demand for exploratory classes to help fill this need as evidenced through the School districts participation in the design and implementation of the RTEC program.

Section 3. Curriculum Equity (<http://www.lanecc.edu/cops/curric.htm>)

To promote an environment where all learners are encouraged to develop their full potential, this course will support Lane's Curriculum Equity policy in the following way(s):

This course will implement materials which present instances of fully integrated human groupings and portray women and men from diverse cultural and ethnic backgrounds in a wide range of roles.

Section 4. For revised courses only: PREVIOUS Catalog/Course Information:

Course Number: _____ Course Title in Banner: _____ (30 characters maximum)

Full Course Title in print catalog:

Prerequisites:

Co-requisites:

Grade Option: ☐ Graded (with P/NP option) ☐ Pass/No Pass only

Number/Type Credits	Term Minimum Contact	Term Maximum Contact	11-Week Term Contact
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__ Lab	__ hours (lab credits x 30)	__ hours (lab credits x 36)	__ hours (lab credits x 33)
__ Total credits (sum)	__ Total hours (sum)	__ Total hours (sum)	__ Total hours (sum)

Course Description:

What will change? ☐ Course Number ☐ Title ☐ Course Description ☐ Credit hours ☐ Contact hours

Section 5. Support Courses (New Professional/Technical course proposals must complete.)

Professional/Technical courses are tracked within programs for purposes of Carl Perkins funding and budgetary planning. Indicate all degree or certificate programs for which this course will be required.

Program	Division
Elective Course (Credit could be used in many CTE programs.) Attach to Diesel Technology	Advanced Technology

Section 6. Overlap Courses (New course proposals must complete.)

While overlap of course materials is not necessarily a flaw, duplication of course materials may lead to inefficient use of college resources. If there is overlap, the faculty of overlapping courses must agree on the extent of overlap and attach a rationale explaining its necessity.

Indicate all departments/courses that this course may overlap. Division Dean of existing course enters one of two options at right. Note: N/A is not an option.

Options:

1. Approved: overlap is acceptable. Rationale attached.
2. Disapproved: reasons attached.

Division	Course Number / Title	% Overlap	Option	Division Dean of existing course (Signature required for all options)	Date
Advanced Technology	Trade Skills Fundamentals APR 101	5%	Approved		

Section 7. Qualification to fulfill degree requirements (complete all relevant forms, available at <http://www.lanecc.edu/currshed/drrcforms.htm>, and send to Mary Brau for the Degree Requirements Review Committee):

☐ Form(s) applying for the following degree requirement status have been attached. (Only check this box when forms have been completed and attached.)

AAOT, ASOT-Bus, OTM:

- ☐ Arts & Letters
☐ Social Sciences
☐ Science /Computer Science
☐ Mathematics

AAOT:

- ☐ Cultural Literacy Option

AAS, 1-year and 2-year certificates:

- ☐ Human Relations

Section 8. Library Impact Statement

Under accreditation standards, Library consultation is essential for new programs, new courses and for substantively revised courses when the revisions entail any change in library use.

What assignments will require the use of library and information resources?

Each academic area has a Liaison Librarian (<http://www.lanecc.edu/library/services/liaison.htm>). Contact the designated librarian to discuss the library needs of your course. Please allow the librarian at least one week to assess library resources.

To be completed by Liaison Librarian:

- ☒ Library resources are adequate to support this proposal.
☐ Additional resources are needed but can be obtained from current funds.
☐ Significant additional Library funds/resources are required to support this proposal.

Liaison Librarian

Date

Section 9. Divisional Approval (To be completed by Division Chair and Administrative Assistant)

Human, Physical, and Financial Resources:

- ☒ Additional instructional costs (staff, materials, services or facilities) will be incurred to offer this course.
Source of funding: General Fund

- ☐ No additional instructional resources (staff, materials, services or facilities) are needed to offer this course.

Explain:

Required Certifications:

- ☒ We have developed minimum course certification standards according to the COPPs procedure "Instructor Qualifications: Credit," to be filed with ASA upon course approval.
☒ We have completed faculty certification form(s) for faculty qualified to teach this course, to be filed with ASA and Human Resources upon course approval.

Fees:

- ☐ We have completed fee rationale and fee request forms to be submitted to ASA upon course approval, in compliance with the COPPs procedure, "Fees: Special"
☒ No special fees will be required for this course.

Divisional Recommendation:

- ☒ The Division Chair and Administrative Assistant have reviewed this course proposal and kept a copy for divisional files.

- ☐ Faculty review of this course was completed within the division on ____ (date).

- ☒ Pass ☐ Do Not Pass

Administrative Assistant/Coordinator

Date

Division Dean

Date

Section 10. College Approval

Curriculum Committee Chair

Date

Executive Dean

Date

Curriculum Approval

Committee hearing:

Date

Vice President, Academic Affairs & Chief Academic Officer

Date